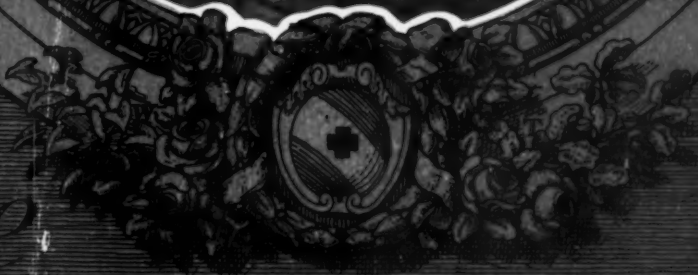


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# The MODERN HOSPITAL

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No. 5

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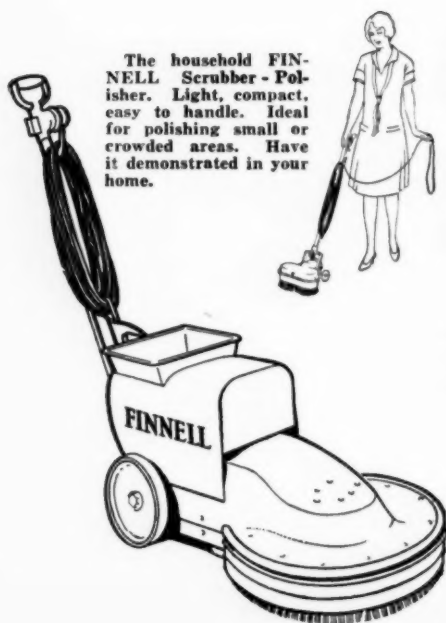
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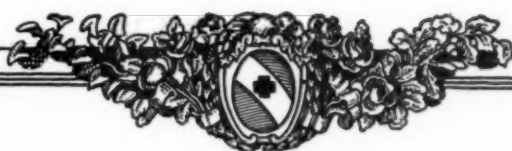
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## *In This Issue*

The issue opens with a discussion of proprietary hospitals by Doctor Davis. The nature of such hospitals, how they differ from other institutions and the problems to which they give rise are considered.

How the general hospital can improve its pediatric service and how the children's hospital can provide adequate medical care for infants and children are treated in an article by Doctor Bachmeyer and Doctor Mitchell on page 56.

Doctor Hamilton, on page 62, tells how the various departments of the hospital can coordinate to achieve the hospital's supreme aim—the discharge of fully restored and well satisfied patients, who during their stay have been largely unconscious of the running of the hospital machinery.

The Kings County Hospital, Brooklyn, N. Y., is the crowning achievement in the growth of a municipal institution almost a century old. Doctor Greeff and Doctor Goldwater in collaboration with the architect give an illustrated description of the new buildings on page 73.

Mr. Cortright's article on nurses' training schools is based on a questionnaire study of training schools in ten states made to discover what the present practice is with regard to the educational aspect of the practical schools of nursing.

Doctor Bierman on page 86 presents data that may serve as a nucleus for a consideration of what shall be considered equitable charges for the hospital's physical therapy department.



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# THE MODERN HOSPITAL

*A Monthly Journal Devoted to the Building, Equipment, Administration and Maintenance of Hospitals and Sanatoriums.*

Vol. XXXIV

May, 1930

No. 5

## The Proprietary Hospital—A Problem and a Challenge

By MICHAEL M. DAVIS

Director for Medical Services, Julius Rosenwald Fund, Chicago

THE entrance of the paying patient into the hospital over the broken barrier of the exclusively charitable tradition has broadened the scope and value of the hospital as an agent for serving the public. It has also created a kind of hospital, the proprietary institution, which fifty years ago could hardly have existed at all, because paying patients went to hospitals only in exceptional cases.

So little systematic attention has been given to this type of hospital that in the course of a series of studies made under a grant from the Rockefeller Foundation, I thought it well to assemble some material on the subject. The nature of proprietary hospitals, the points of difference from other types, their number in the United States, their geographical distribution, the causes through which they originated and the problems to which they give rise are points to be considered.

The typical general hospital in this country is organized with the expectation of receiving both paying and nonpaying patients. It may be under a department of government, an independent board of trustees or a religious or benevolent association. In any of these forms, it is a non-profit organization. In some parts of the country it often secures enough income from its paying patients to meet its annual expenses and perhaps to do not a little work at less than cost or free. It may show, as some hospitals do in some years, a surplus of annual income over annual expenses. The existence of a surplus does not, however, con-

stitute it a proprietary or profitmaking hospital. This point has been defined by court decision as well as by practical experience. The distinguishing characteristic is not the existence of a surplus but its disposition. In the typical hospital any surplus that occurs does not go to individuals but into the work for its expansion or improvement, or it is put aside as working capital or endowment. In the East of the country annual deficits are more likely to be taken for granted among hospitals than in the West, but the fundamental organization of public service hospitals does not vary greatly.

### *The Plan of the Proprietary Hospital*

The proprietary hospital, on the other hand, is established by an individual, a partnership or a corporation on a basis similar to a business. It may have, and may realize in practice, an excellent intention of rendering service to a community, but it is so organized that if successful, it will make money for individuals. From a local standpoint, it may take the form of a business corporation the stock of which is owned by certain persons, and which, it is hoped, will pay dividends, or it may be unincorporated and owned by an individual or a partnership like a small business enterprise. The owners and managers of a proprietary hospital may put some or all of the annual surplus into the work if they wish to do so. But they have the right to use it for themselves if they so desire and if they have established the hospital as a means of livelihood,



may be so situated that they must. A proprietary hospital may also run a deficit, but not for very long.

As to their legal organization, some proprietary hospitals are incorporated; others, usually small ones, are owned by an individual or by a partnership. The corporate form of a proprietary hospital is ordinarily that of a stock corporation, the usual business type of corporation in which the owners hold the stock, and at meetings of the corporation have votes in proportion to their holdings. The nonproprietary hospital, when incorporated, is in most states the so-called membership corporation which has not capital stock. Its corporate body is composed of individuals who are designated in various ways and who are sometimes self-perpetuating.

#### *Approximately 2,000 Are Listed*

A recent estimate that I made stated that there were about 2,000 proprietary hospitals in the United States on the registered list of the American Medical Association.<sup>1</sup> This number is about 300 larger than the figure given by the Council on Medical Education and Hospitals of the association in the March 30, 1929, issue of the *Journal of the American Medical Association*, for the reason that the council classifies as "proprietary" only hospitals owned by a single physician or by two or more in partnership. It does not include in its total of 1,699 proprietary hospitals those established by associations of physicians and others who hold stock or have sold it to outsiders. In this article, however, we are considering all hospitals incorporated for profit or organized with a similar intention. Those established and controlled by lay associations or incorporated groups of physicians are of distinct importance, as will appear.

Dr. C. R. Rorem, in the course of a study of capital investment and other financial problems of hospitals, in which he is at present engaged, has had occasion to review the classification of hospitals and to make a new estimate. In preparing this, he has had the benefit of information he has secured personally from many hospitals, thus being able to check and correct the less reliable data that can be gathered by questionnaires. He comes to the conclusion that my estimate of 300 proprietary hospitals established as corporations or associations was only half the correct number. He also has been able to estimate the bed capacity of these 600 institutions and judges it to be about 32,000. The 1,699 proprietary hospitals listed as such by the American Medical As-

sociation have a bed capacity of nearly 40,000, making a total of 2,300 proprietary hospitals on the registered list, with 72,000 beds. To this must be added the 306 proprietary hospitals that the American Medical Association regarded as not worthy to be included in its list. It is probable that these have less than 8,000 beds, making a grand total of 2,600 proprietary hospitals in the United States, with about 80,000 beds. It will be noted that the average size of these hospitals is only about thirty beds.

Proprietary hospitals are distributed over every state in the Union, but the majority of beds are in the sixteen states given in the accompanying table. These figures are only partial, since they include neither the corporate nor the unregistered hospitals. California and Texas head the list with 147 and 115 hospitals respectively. New York comes third with ninety-one. It will be seen from the preceding figures that proprietary hospitals constitute as much as 30 per cent of the 6,852 hospitals on the registered list in the United States. On the other hand their small average size renders them much less significant than this proportion would suggest. The 72,000 beds which the 2,300 hospitals provide are not more than 8 per cent of the 893,000 beds on the registered list.

It should be mentioned that hospitals established and maintained by industries for the benefit of their employees are in a sense organized for business purposes. From one point of view, they resemble proprietary hospitals, but they differ much in other ways and to put them into the same classification would be unsound. Moreover, the number of industrial hospitals is only 157 and the number of beds only 7,047, so that the group is too small to render its inclusion or exclusion of statistical importance. In any event, the proprietary hospital needs to be discussed from other than a statistical standpoint in order to show its significance.

#### *One-Hospital Towns*

Many towns, particularly in the West and in the South, have not recognized a hospital as a community responsibility. The citizens of these towns would often be entirely without hospital facilities were it not for the incentive of physicians who provide hospitals at their own risk. A live physician, usually one interested in surgery, may open a five-bed or a ten-bed hospital in his own home, or a somewhat larger institution in a commodious residence which he buys or rents. The physical characteristics and the equipment of the hospital will depend largely upon the physician's knowledge and the funds that he can

<sup>1</sup> Davis, Michael M., *Hospital Administration: A Career*, New York, 1929, Appendix, pp. 96-97.

invest or can obtain from other physicians or lay friends. Of the 147 proprietary hospitals in California, as shown in the accompanying table, 48 were the only hospitals in their respective towns. Of the 115 proprietary hospitals in Texas, more than half (60) occupied the same position. This is true also of 46 of the 78 in Minnesota and 18 of the 58 in North Carolina. Such one-man hospitals in towns of small size may run on for years. Other physicians in the same town may follow the example of the first hospital founder so that one small town may have several little hospitals of this type. This is the case in at least five places in Texas.

Since the list in the accompanying table includes none of the proprietary hospitals controlled by associations as distinct from individuals or partnerships, the inclusion of these would increase the proportion of the proprietary institutions which are the only hospitals in their respective communities.

#### *Caring for the Increasing Demand*

As hospital work broadens and the public becomes more accustomed to it, the demand for hospital beds increases, surgery is done for other than emergency cases, and maternity and medical cases come in in appreciably larger numbers. The one-man hospital, the only one in its town, may not be able to meet the demands for either quantity or quality of service. Such a hospital may be frequently enlarged and may become a community institution. On the other hand, it may remain proprietary, perhaps with a considerable group of physicians as its owners and its staff. Funds for enlargement are usually secured, at least in part, from laymen of the locality in return for bonds or stock.

An excellent hospital in a Southern state exemplifies the evolution of a proprietary institution. It was started in 1913 by two surgeons of standing and competence. It has advanced with the growth of the town and the increasing trend toward hospitalization into essentially a community institution. As the only hospital in the town it has often been unable to refuse cases even when they could not pay, yet because of its proprietary type of organization it has secured neither remission of local taxes nor donations for its support. The owners have been forced to carry a burden that should fall on the community. The hospital is said to have run at a loss during recent years, the deficit having been met by the owners out of their fees received as surgeons. Recently they have taken steps toward transforming their hospital into a nonprofit organization, although the public of the locality does not yet

seem prepared to pay them a reasonable amount for their personal investment in the enterprise. It is noteworthy that this hospital has made provision for colored as well as for white patients.

Few towns with only one hospital and that a small proprietary one, are as well served as in the instance just quoted. The physician starting such a hospital may lack experience. He is still more likely to lack the resources to equip and conduct even a very small institution satisfactorily. This is especially noticeable in sections of the country and among groups of the popula-

TABLE SHOWING NUMBER OF PROPRIETARY HOSPITALS IN SIXTEEN STATES<sup>1</sup>

State	No. Hospitals	No. Beds
California .....	147	3,229
Texas .....	115	2,866
New York .....	91	3,020
Minnesota .....	78	1,338
Iowa .....	66	1,037
Illinois .....	63	1,333
Pennsylvania .....	59	1,456
North Carolina .....	58	1,947
Ohio .....	56	1,069
Massachusetts .....	55	978
Oklahoma .....	52	1,550
Nebraska .....	51	927
Michigan .....	48	956
Georgia .....	45	1,217
Tennessee .....	42	1,114
Missouri .....	41	1,126
	1,067	25,163

<sup>1</sup> Taken from Table 2, Journal of the American Medical Association, March 30, 1929, p. 1047.

tion that are comparatively poor. The struggles of Negro physicians in some Southern towns to develop hospitals in which Negro patients can be served and in which they themselves can have some modern facilities are obvious examples. In one town of 20,000 in one of the larger Southern states, a hospital has been set up in a large two-story building eighteen or twenty years old, with space for twenty-five beds. Because of its inadequate facilities it rarely has more than six or eight patients. At the time I visited there it had four. The equipment was pitifully inadequate. The three nurses in the institution had to do not only the professional work, but, for a good part of the time, the cooking and house cleaning as well.

Occasionally in the East, more often in the Middle West, and very frequently in the Far West, groups of doctors have established hospitals to take care of their practices and to provide high grade service for the community. Sometimes all the stock is held by the doctors themselves, some-



times it has been offered to outsiders. These hospitals are run as business concerns, often with a business manager under a medical director. Usually no attempt is made to do free work, except a certain amount of what may be called "involuntary charity," that is, taking care of patients who later prove unable to pay their bills.

In some instances these hospitals were opened in connection with group clinics in order to facilitate complete service to patients. One excellent 100-bed hospital connected with a group clinic in a California city is unique in that its staff interlocks with the members of the city health department. It has been established nearly thirty years and is still the only hospital in town. The city and the hospital cooperate closely, the city sending all its charity cases there and reimbursing the hospital therefor. The members of the hospital staff comprise practically all the physicians in town.

#### *Successful and Unsuccessful Examples*

Another hospital in the Far West, established five years ago, raised the money for building and equipment through the sale of stock. It was successful from the start. One hundred and twenty-eight physicians patronized it in 1928, and 4,611 patients were cared for. The net profit in that year was stated as \$23,535, after charging off bad debts amounting to over \$4,000.

The following extracts from the president's report to the stockholders are worth quoting: "The financial statement for the year 1928 will reveal to the critical examiner that our income has increased materially; that our liabilities have been consistently and steadily decreased, and that our net profits have been all that could be expected. If our stockholders will realize that we are paying nearly \$20,000 in interest to the banks and at the same time meeting all our other obligations promptly, they will realize that ——— Hospital is doing very well indeed. . . . We now have a staff numbering sixty-three men. They represent the best physicians and surgeons in the community, and it is through their loyal support that we have been able to attain the perfection required by the American College of Surgeons, whose inspection we have successfully passed."

Since a considerable proportion of the physicians in the large cities have no appointments on the staff of the chief community hospital, or on any hospital staff, some of them feel an incentive to establish institutions of their own. Hopes of money-making have sometimes caused lay individuals or lay groups to initiate hospitals and to seek the patronage of physicians who will bring them private patients.

In a city of 40,000 persons within an hour's ride of New York, there is one large public service hospital and a few other small institutions. A physician, not on the staff of any of these, set up his own hospital ten years ago. It now has ninety-five beds. This hospital is not approved by the American College of Surgeons. It is, however, listed in the directory of the American Medical Association. A quarter page advertisement of it appears in the 1928 issue, advertising a training school for nurses and a school of midwifery. "Staff and faculty of twenty-five" is stated in the advertisement, but in the same year the professional staff list, given to a visitor by the owner, contained only sixteen names, including his own. Not one of these men was on the official staffs of the two public service hospitals in the county; one or two of the names could not be found in either state or national directories.

Although the community hospitals were badly crowded during portions of the year, this proprietary institution did not run over a 50 per cent occupancy. It is housed in a three-story and basement frame structure. The owner talks of additions and a new building, but it is doubtful if these will materialize. He states that he has lost over \$70,000 during its life and would like to see the hospital transformed into a nonprofit community institution.

#### *"The One-Man Show"*

There is also a type of physician whose disposition can tolerate only a "one man show." Such a person is likely to prefer to set up his own establishment rather than to conform to the rules and regulations of the majority. The owner of a hospital in a middle-sized Eastern city seems to belong to this class. He is a graduate of a well known medical college and a member of the American College of Surgeons. His hospital is a substantial brick building, of the dwelling type, with a capacity of thirty beds. He opened it in 1910 when there was only one other hospital of importance in town. Eighty per cent of the cases are surgical and about 12 per cent obstetrical. People like to come to him, he says, because his place is homelike and because he has always had graduate nurses at a time when the standards of nursing at the community hospital were poor. At present he and his associate handle most of the work but before the second community hospital was built many of the doctors in town preferred, according to his story, to bring their patients to him rather than to take them to the only other existing institution of any size. Sometimes, he says, patients ask their doctors to send them to him.



In many cities examples can be found in which women, usually nurses, but sometimes without training, have started hospitals in their own homes as a means of livelihood. Sometimes they begin by taking in one or two old persons or convalescents. Doctors may send patients to them because they have no other hospital affiliations or because prices are lower than those of the regular hospitals. Such places do not deserve the name "hospital"; they are merely boarding houses for sick people. They remind one of "nursing homes" in England, which because of the strength of the ancient charity tradition, are often the only places in which the well-to-do can secure hospital care, and are generally much inferior to the wards in the old established British hospitals.

#### *Misnamed Institutions—and Others*

A physician of my acquaintance, visiting a number of proprietary institutions in New York in the course of a hospital survey, rang the bell at an institution listed in the telephone book as a "hospital." At the third ring a somewhat flustered woman appeared. "What is it?" she asked urgently. "I am Dr. ——— and I would like to find out . . ." but the visitor could get no further, for the woman, catching the word "doctor" said, "Come upstairs quick! I have a woman there in labor and have been trying for half an hour to get a physician." The surprised medical visitor actually attended the birth.

Another example, also in an Eastern state, is a hospital owned and managed by a nurse who had had previous experience as a superintendent. She began in her own home, she said, in order to have a place for her ailing mother. The front parlor is used as a ward for men. Four were crowded in there, on the day a visitor inspected it, with screens protecting the beds quite inadequately from the gaze of anyone who might enter the front hall. The small operating room is on the same floor. It would be impossible to make it surgically clean. There is a laboratory, so-called, in the basement. An outside physician takes the x-rays. The only microscope occupied an important but dust covered position under a glass case on the superintendent's desk. There were four bedrooms upstairs with two beds apiece. The patients brought there are for the most part accident cases picked up on the road, and those in need of minor surgical operations. The physicians whom she mentioned as patronizing her establishment were doctors of whom the leading physicians of the locality did not speak highly.

In contrast to these dreary pictures are up-to-date and well managed institutions that promi-

nent doctors utilize to accommodate their rich patients. To take care of such patients some hospitals have built private pavilions in an endeavor to cater to their tastes. Some wealthy patients, however, may prefer a private hospital where they can have their personal physicians and feel "out of the institutional atmosphere." At one such place in New York, run by a graduate nurse, daily rates are from \$9 to \$50 a day, the average being \$15 and \$16. Suites are \$45 and \$50 a day. Another New York "sanitarium" for obstetrical cases charges only from \$12 to \$20 a day. These are high grade institutions, patronized by wealthy and prominent people sent there by some of the leading physicians in the city.

Another proprietary hospital in the vicinity of Chicago has over 300 beds, an out-patient department and a school of nursing. It complies with the standards of the American College of Surgeons and is approved by the American Medical Association Council on Medical Education and Hospitals, for both general internship and residence in specialties. The hospital gives a visitor the impression of good management. It has over sixty physicians on its staff, all but nine graduates of Class A medical schools.

#### *Special Proprietary Hospitals*

A special incentive to the formation of some proprietary hospitals has been given by the opportunities for industrial medical practice. Thus in a large city in California, a physician who has been practicing industrial medicine for nearly twenty years opened his own hospital about nine years ago. He has been desirous of building up a high grade service for patients injured through industry and of educating employers to realize that it is to their advantage to give their injured employees the best care. His hospital provides four emergency units in outlying sections in addition to the well equipped central building in the industrial district of the city. He has a salaried staff of physicians. The American College of Surgeons has approved the hospital and the American Medical Association lists it for residence in specialties. It is not on their "approved for internship" list, probably because it has only seventy-five beds. The owner-superintendent recently offered to take care of industrial workers, their families and friends, suffering from ailments not subject to compensation, at compensation rates in both out-patient department and hospital.

The care of mental disease is now recognized as primarily a function of the state, and some 300,000 beds are provided for mental cases in this country under state and other government

control. These institutions, however, are rarely sought by patients from well-to-do families. Hence there has been some incentive to establish proprietary institutions, as well as a few voluntary hospitals of high grade, such as the Bloomingdale branch of the New York Hospital in White Plains, N. Y., and the McLean Hospital under the auspices of the Massachusetts General Hospital, Boston. The proprietary hospitals for mental and nervous cases are about 131 in number, constituting about 24 per cent of all the mental and nervous hospitals in the country, but only about 1 per cent of the total number of beds for this class of cases. As a rule these institutions bear the name of sanatoriums rather than of hospitals, and do not provide for facilities beyond custodial care. A few specialists in mental and nervous diseases utilize expensive and excellently managed proprietary institutions for their private patients.

The institutional care of tuberculosis is now recognized as largely a governmental responsibility, though nongovernmental agencies still play a greater part in providing it than in the case of mental disease. Nongovernmental hospitals or sanatoriums in the United States constitute over 40 per cent of the total number of institutions and provide 25 per cent of the number of tuberculosis beds, but the proprietary institutions for the care of tuberculosis are relatively few, only 82 being listed, with 2,818 beds, only about 5 per cent of all the beds for tuberculosis. These are generally small private sanatoriums for paying patients.

#### *What the Review Shows*

The preceding review makes clear that: (1) Proprietary hospitals have played a distinct though relatively diminishing rôle in providing hospital care in small communities. (2) In both large and small places some distinctive examples of serviceable institutions of high standard have developed under proprietary auspices. (3) In the total hospital service of the United States, the proprietary hospital constitutes but a small fraction, only about one bed in every twenty. (4) A considerable proportion of the proprietary institutions are of questionable grade. Out of the 458 hospitals that in 1928 were regarded by the American Medical Association as unworthy of inclusion in their registered list of medical institutions, 306 or 67 per cent were proprietary.

The incentives to starting proprietary hospitals may be professional or financial. In the case of physicians, they may be both; in the case of other than physicians, they are purely financial. Worthy professional incentives have given rise

to excellent examples of public service through proprietary hospitals in small communities, although it is an increasingly important question whether the physicians should have to shoulder the financial burden and risk of providing hospital care for a community. In cities of any considerable size, professional incentive too often is unable to realize standards of service comparable with public service hospitals, except when the proprietary hospital is limited to providing care for a wealthy group.

#### *What Will the Future Bring?*

The underlying reason for this is economic, namely, the difficulty of securing sufficient capital. A proprietary hospital must raise the capital for its building and equipment on a business basis, either from the savings of those who are interested in establishing it or by the sale of bonds or stock on which interest or dividends must be paid. The amount of capital needed in establishing a hospital is generally too large for physicians to provide themselves, and control by laymen who buy stock or bonds may therefore be involved. In any case, the proprietary hospital must pay interest on its investment and also taxes, which public service hospitals generally do not have to do.

From the purely business standpoint, there is small incentive to laymen to invest capital in hospitals with the hope of profit, as compared with investment in other lines. In the first place, a hospital requires an unusually large investment in comparison with buildings for other purposes. In the second place, the hospital business is of a highly technical nature. Success depends greatly on skilled management which is difficult to obtain and not so easy to supervise as in the case of less technical undertakings. In the third place, there is competition with nonproprietary hospitals. Hospitals have been steadily increasing in the scope of their medical work and in the proportion of the population who seek them in time of illness. Capital investment per hospital bed is increasing and there is a growing tendency to recognize the need for community hospitals. These factors seem likely to diminish the readiness to invest capital in hospitals simply for the sake of making a profit.

The existence of proprietary hospitals having low standards raises the question of supervision and control. In several cities such as New York and Chicago the health department is required to inspect and license proprietary hospitals but this is mainly from the standpoint of construction and sanitation. The state boards of charity or



of public welfare have the authority in some states to require reports from hospitals and to exercise a certain amount of supervision over them but generally are not empowered by law to include proprietary hospitals within their scope. Low standard hospitals are frequently very small units, too small to come within the inspection of such professional bodies as the American College of Surgeons.

The freedom to choose one's own occupation

#### PROPRIETARY AND NONPROFIT HOSPITALS IN THE UNITED STATES

Nonprofit hospitals .....	4,553
Proprietary association hospitals ....	600
Individual or partnership hospitals ..	1,699
Unregistered proprietary hospitals ..	306

and to start a business to make an honest living is an American right that should be preserved by all means, but the hospital business has a public interest that does not pertain to ordinary business. The selling of hospital service for a profit is not the same as the selling of shoes or automobiles. The buyer of hospital service often is not in a position to protect himself even if he were a judge of the quality of the product, which as a rule he is not. If he buys poor shoes, he will lose money, but if he buys poor hospital care he may lose his life. All hospitals are justifiably subject to public supervision, and this is particularly required for institutions in which considerations of personal profit might override those of service. The right to establish and maintain a hospital as a business should not be taken away, but there should be effective agencies for inspection and for enforcing at least minimum standards of service. A recent New Jersey law has

#### PROPRIETARY AND NONPROFIT HOSPITAL BEDS IN THE UNITED STATES

	<i>Beds</i>
Nonprofit hospitals .....	821,224
Individual or partnership hospitals.	32,000
Proprietary association hospitals ..	39,710
Unregistered proprietary hospitals	
App.	8,000

empowered the state department of institutions and agencies to license and inspect all proprietary hospitals, with implied powers of enforcement of standards.

There is a considerable similarity between the provision of hospital service and of educational facilities. Both are matters in which the whole public has an interest to a degree not existing in ordinary business undertakings. The govern-

ment has assumed the main responsibility for education although private initiative in providing schools and colleges is by no means excluded. In hospitals, a larger proportion of the field remains under nongovernmental auspices and there seems little likelihood that voluntary effort in this field will be restricted. But an overwhelming proportion of voluntary effort in the hospital field is on a nonprofit basis.

Further study should be given to the proprietary hospital and to numerous questions that this brief review raises, before authoritative answers to many questions can be made. However, one cannot but come tentatively to the conclusion that effective extension of proprietary hospitals is unlikely; that in towns and rural areas the hospitals established and supported on a community, nonprofit basis, will be dominant in the future, and that in the cities, the proprietary hospitals will, because of legal, economic and professional restrictions, play a diminishing rather than an increasing rôle except as they are limited to a wealthy clientele. In this respect the proprietary hospital's future may be similar to that of the private academy catering to a small social group with ample funds.

### Measuring a Hospital's Success by the Percentage of Its Occupancy

That an average hospital bed occupancy of less than 70 per cent is too small is emphasized in the recent survey of health and hospital services in Philadelphia. A use throughout the year of from 80 to 85 per cent is regarded as an excellent record. Hospitals averaging 30, 40 or 50 per cent of use raise doubts of their necessity and of their effectiveness as community institutions.

"The extent to which hospitals are used is measured by comparing the actual number of hospital or patient days with the maximum number of potential days—that is, if every bed were used every day in the year," says the survey. "This is found by multiplying the number of beds by 365 days and dividing the actual days of care furnished by this maximum possible utilization figure. Hospitals, however, do not expect to use every bed every day in the year, since allowance must be made for cleaning, repainting and renovations.

"Certain hospitals for special kinds of cases frequently show a high degree of bed occupancy, such as those for orthopedic conditions, a popular maternity hospital or a neighborhood hospital for children. On the other hand, other types of special hospitals may be well used and frequently show lower averages than general hospitals. For example, the fluctuations in the prevalence of disease among young children frequently places great pressure upon children's hospitals during the winter months, with periods of low use at other times of the year; similarly the considerable variation in the demand for maternity beds not infrequently results in a bed occupancy below 70 per cent, although there may be periods of high utilization."



# What Hospitals Can Do to Improve Pediatric Service

By ARTHUR C. BACHMEYER, M.D.

Superintendent, Cincinnati General Hospital, Cincinnati, and

A. GRAEME MITCHELL, M.D.

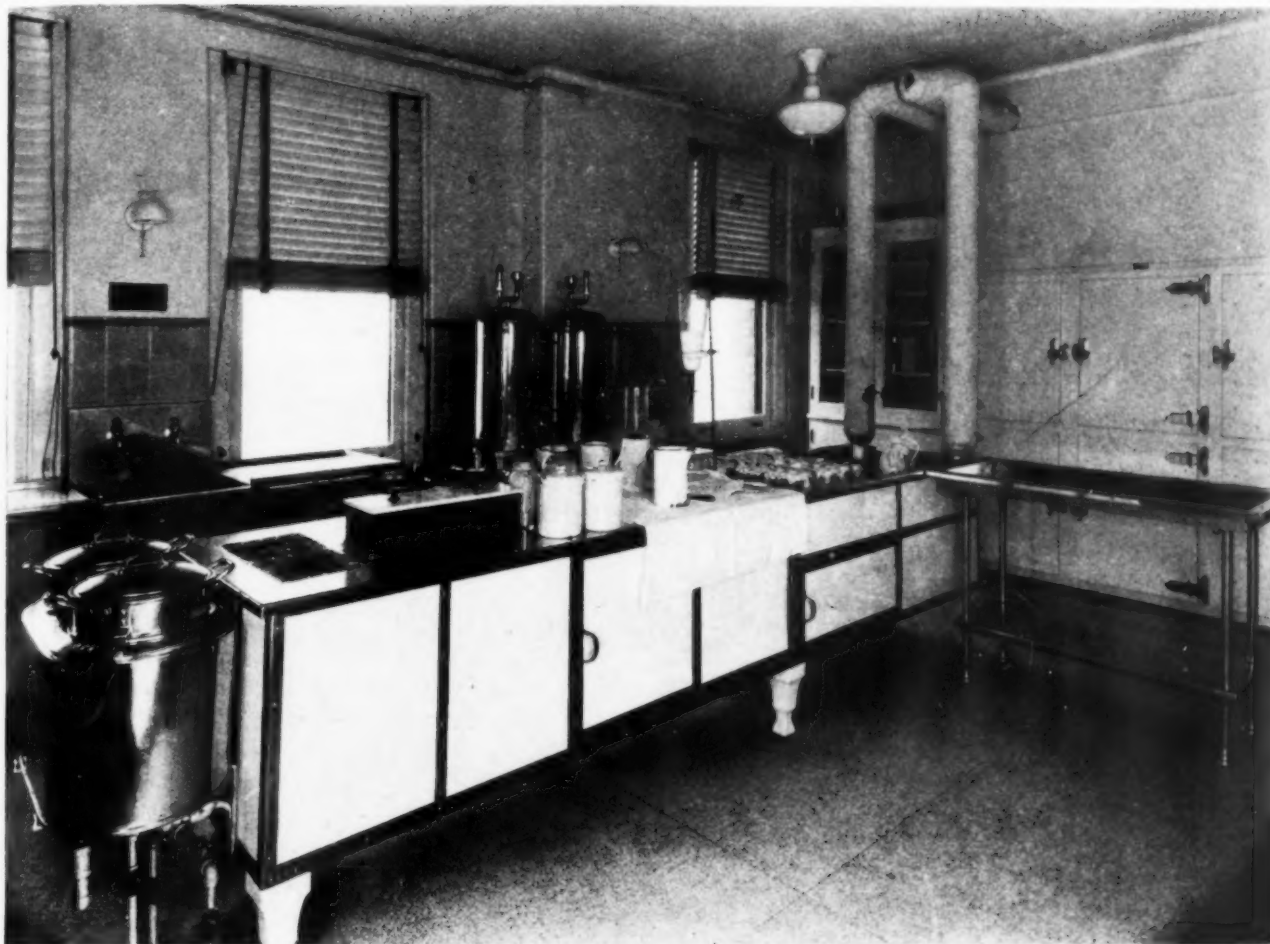
Professor of Pediatrics, College of Medicine, University of Cincinnati

**T**HAT pediatrics imposes special requirements in hospital practice is now acknowledged. In the days before it was recognized that the child was more than a little man, and before physicians especially interested and trained in the care of infants and children were a part of the medical plan, pediatric problems in the hospital received little attention. Because this state of affairs reacted to the detriment of the sick child it was natural that it should change. It must be admitted, however, that the establishment of special pediatric wards and special pediatric hospitals came about largely through the stimulus of the pediatrician rather than primarily because of the hospital's interest in children.

While the object of this presentation is to discuss the pediatric service of a general hospital, it is almost essential to mention the fact that medical care for infants and children can best be given in a children's hospital. The entire organization of pediatrics, including administration, medicine, nursing, social service, dietetics and perhaps, too, the physical equipment and its care presents problems differing from those that exist in adult medicine. Fortunately, however, it is possible to obviate many of the difficulties if it is recognized that the closer the general hospital's pediatric service approaches the ideal of the proper children's hospital the better will it be. A more complete discussion of this subject will



*Ward cubicles in the children's department should be well lighted and well ventilated.*



*The milk laboratory is an important part of the children's department. It need not be large if it is properly planned.*

be found in an article by A. O. Elzner, Dr. A. C. Bachmeyer and Elizabeth Pierce that appeared in *THE MODERN HOSPITAL* for March, 1927.

In any plan it is best to visualize first the functions, second the organization and personnel to carry them out and, third, the physical equipment that will supply the mechanism for the organization and personnel to perform their duties so that they will not seem to be duties.

Broadly conceived, the functions of pediatrics are: the care of well and sick infants and children; the education of parents and families concerning the prevention of disease and the preservation of the physical and mental health of their children; the instruction of undergraduate and graduate medical students and nurses in managing well and sick children and in promoting investigation. For some of these activities the hospital is largely responsible; in others it is a cooperating agency; in still others it furnishes the field in which specially trained persons work.

The hospital, then, is the principal factor in the care of the sick child and it may or may not be the place for coordinating work for the well child. Under any circumstances it has a part to play

in the instruction given to parents in the prevention of mental and physical ill health, and it must establish the best cooperation with any agencies that have such functions as their primary object. In teaching, the hospital, while not responsible, provides the field and is interested both in the extra load teaching imposes upon its nursing, social service and other personnel and in seeing that teaching is properly conducted in its in-patient and out-patient departments. In investigation, the hospital is not a directing but a coordinating agent and a field for work.

Whether children are suffering from surgical, orthopedic, otolaryngological, genito-urinary, dermatological or nervous conditions, they should all be under pediatric control. Only in this way may the general state of their health be discovered and proper dietary and other measures instituted. It is hardly conceivable that the surgeon, the orthopedist, the otolaryngologist, the genito-urinary specialist and the dermatologist are trained to care for all aspects of child health. Particularly is it necessary that the newborn infant be under pediatric supervision.

The organization and personnel of the pediatric

department of a hospital will depend to a certain extent upon whether or not it is a teaching institution. If an academic connection exists, it would be obvious that the head of the pediatric department of the affiliated college of medicine should be the director of pediatrics in the hospital. In the Cincinnati General Hospital the contagious disease department is linked in teaching and direction to pediatrics, and this makes a satisfactory association both in teaching and hospital work. The amount of time consumed in the medical administration of a large department of pediatrics, especially if it is a teaching one, makes it almost essential that it be done by someone who is devoting the major portion of his time to it. It seems unfair to ask the voluntary man to do this. As a matter of fact he seldom can, or does.

#### *College Affiliation Simplifies Matters*

The college affiliation makes the matter a simple one. The ideal set-up involves a medical personnel in which the director and some of the associates are either full-time or part-time and some are voluntary. All of these groups are necessary and can work together, and their coordination makes a better and broader plan both in teaching and in the care of patients than either a strictly full-time group or an entirely voluntary one. Parenthetically it may be stated that our definition of "full-time" does not exclude outside contact in consultation work. The resident physicians in a pediatric service should preferably consist of those who, having completed at least one year of rotating service in a general hospital, are seriously spending one or two years or more in pediatric training. These residents should give service in both in-patient and out-patient departments and if possible part of their training should be in contagious diseases.

In Cincinnati we have an ideal arrangement whereby part of each year's service is spent by the resident in extramural work in well baby clinics. Much that has been recommended in the preceding paragraphs applies to the larger hospital with an active and extensive pediatric department. In smaller institutions where undergraduate medical teaching is not carried out, it is necessary and possible to do good work with a less extensive pediatric medical organization and with a voluntary one. Even then, however, it should be directed by a pediatrician who seriously considers his job as a major and not a minor part of his daily business.

A successful organization is possible only through the sympathetic understanding and close cooperation of the executive administration and the medical administration, without which smooth

functioning is impossible. The ideal situation demands recognized and established procedures which, within the limits of human frailty and personality difficulties, can allow devotion to interesting, helpful and profitable problems with little disturbance by petty details. The first essential in securing this is a recognition of where one type of administration begins and the other ends. It is not within the province of this discussion to dilate upon this important matter, but an illustration may be given. For example, in the establishment of quarantine in the hospital it is a medical problem to advise when and where it should be instituted, but it is an executive function to see that it is carried out and that all the details that are involved, such as nursing, laundry, visitors, restriction of admission of patients and the like are placed in motion.

The nursing personnel is practically equal in importance to the medical. In a pediatric department in a general hospital the problem of a sufficient number of nurses immediately arises. It is obvious that children, and especially infants, require more nursing care than most, if not all other types of patients. It is difficult to put a greater number of undergraduate nurses on the pediatric wards than in other wards because of the schedules of rotation essential in the training of the undergraduate nurse. Perhaps the problem is best solved by having an adequate number of graduate nurses trained in pediatrics in both executive positions and on general duty. The closer the recommended ideal of two nurses to every three patients is reached and the more permanent the nursing personnel, the better will be the nursing care.

#### *Cubicle System Offers Advantages*

There is no doubt, too, that the teaching of medical students and their presence in the wards adds to the number of nurses necessary. Part of the problem of pediatric nursing can be solved by the employment of a reasonable number of nurse aids. Under proper supervision and with correct instruction, such less highly trained persons can greatly relieve the nursing load. The increase in the amount of teaching to undergraduate nurses which the present ideas of nursing education have made necessary must be taken into consideration in the plan. The statement that a hospital has so many nurses for a given number of patients means little if they are not readily available for the actual nursing procedures.

For those pediatric patients who remain for long periods of time in the hospital there should be made arrangements for school instruction and



The nurses' station, placed in a central location, permits ready control of all visitors to the ward. The partitions along the corridors and between the small wards are glazed and allow visual control at all times. Smaller desks for nurses and for residents placed in the corridors adjacent to the cubicled wards save many steps and permit the nurse to do much of her charting and other paper work where she can at the same time ob-

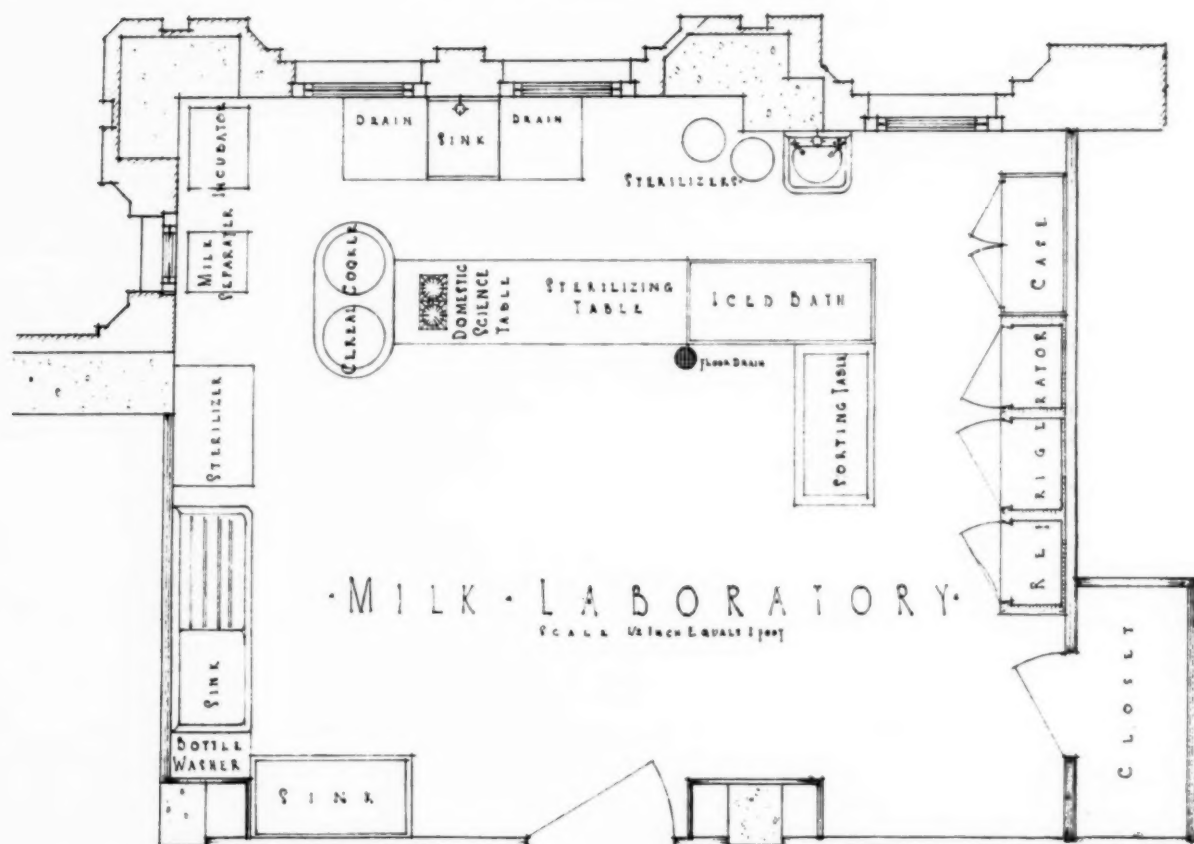
A typical unit of the Children's Hospital,  
Cincinnati.

The nurses' station, centrally placed, allows  
visual control of the ward at all times.

serve her patients. The solariums, though also

*The nurses' station, centrally placed, allows visual control of the ward at all times.*

The area included in the cubicle proper should not be less than six by seven feet, so that the child's bed may be approached from either side. If a three-foot bed is used, this area allows only an eighteen-inch space on either side. It is readily seen, therefore, that a six-foot width is an absolute minimum, and a wider cubicle is to be preferred. While the child's bed may be more conveniently moved than the adult bed, there should be sufficient room for both doctor and nurse, one on either side of the bed, when examinations are being made or treatments given. The child's bed, in most instances need not be over thirty inches wide and, in our experience, the six-foot width of cubicle is sufficient.



Ward units should be well lighted and well ventilated. Cubicle partitions should be so arranged that they do not interfere with the circulation of the air.

The provisions for the care of bed linen, separate toilet articles and toys, and storage space for other similar articles belonging to the child, in cabinets adjacent to the cubicle, make a convenient and labor saving arrangement.

Sufficient lavatories, conveniently placed, must be provided for the performance of proper nursing and medical technique.

The utility room need not differ from those used to serve the wards for adult patients. It is desirable, however, that clinic sinks be used, rather than the more modern bedpan washer, particularly in the infant quarters. These should also be placed near the window so that the nurse may have sufficient illumination to observe the contents of the soiled napkins. A hose connection with spray nozzle is helpful in developing proper technique in this instance. The top of the toilet sink should be raised to a height of thirty-four inches in order to eliminate unnecessary stooping.

A central grouping of the treatment room, the diet or service kitchen, the blanket warmer, the medicine and linen closets, the flower rooms and the laundry chute and incinerator is of great assistance in solving many nursing problems. The use of a central treatment room is strongly

advised. The removal of the patient from the cubicle to such a treatment room, for diagnostic and therapeutic procedures, adds much to the comfort of the other patients and is of assistance in maintaining a happy atmosphere in the ward.

It is extremely helpful and conducive to good medical practice to have a small laboratory bench or table to permit the performance of such minor procedures as routine urine and blood analyses, bacterial smear examinations and the like in the ward treatment room. These small ward laboratories do not, of course, obviate the necessity for the central clinical laboratory.

The bathrooms should be provided with raised tubs for the use of the two to six or seven year old children. Showers for the older groups have been found to be desirable. In the baby units, the baby bath fixtures may be employed. Though the installation is rather expensive, the individual lavatory in each infant cubicle provides not only greater privacy but also greater protection against cross infections.

In the toilet rooms provision should be made for the junior or juvenile toilet bowls. It is deemed advisable not to use doors on any of the toilet stalls in the children's toilets.

For the care of premature infants, a separate room with humidity and temperature control should be provided. A second small room or compartment that will serve as a "temperature" lock

between the corridor or the ward unit and the constant temperature room is necessary. This, however, does not entirely obviate the necessity of providing separate incubator beds for certain of these infants. The provision of such rooms and separate incubators permits greater flexibility in caring for the needs of these patients.

While glass and china may be used for dishes for the older group of children it is advisable to provide unbreakable utensils for the younger ones. Even these must be frequently replaced because, if they are light enough in weight to be usable, they will soon be dented and unsightly.

Beds, chairs, tables and other furniture should of course be provided in sizes and proportions according to the service.

#### *Noise Reducing Measures Are Necessary*

Inasmuch as children in the pediatric department of a general hospital are likely at times to be noisy and consequently disturbing to patients in near-by adult wards, precautions should be taken to avoid such difficulties. Soft floors, preferably rubber, and sound absorbent treatment of the ceilings are advised. By eliminating the production of noise caused by dropping toys and other articles, and by quickly absorbing that caused by the chattering, calling, laughter and cries of the children, the comfort of other patients and of the personnel is enhanced.

Open air porches, so placed that they may be used for natural heliotherapy, should also be available. When possible, provision should also be made for the quick and convenient removal of certain patients to the lawn or playground. We have found that such facilities have been helpful in promoting the welfare and in aiding in the recovery of our patients.

An extremely helpful accessory is a small and simply equipped diet kitchen in which the method of preparation of mixtures and foods may be demonstrated to mothers. Such a room might well open into a classroom so that it can be employed for instruction to students as well as to parents. The best location for such a classroom may be in the out-patient clinic.

Of great importance is the milk laboratory. Even if the hospital is staffed by a group of pediatricians who employ relatively simple milk formulas it is better that the infants' food be prepared in a place separate from that of the older children. The milk laboratory need not be large if it is properly planned.

Somewhere in the hospital, living quarters for wet nurses and nursing mothers should be provided.

A special department to care for infants and

children suffering from gonorrheal vulvovaginitis is a necessity in some hospitals. All hospitals need not have such facilities, but there should be sufficient in one or more of them to cover the need of the community. While many children suffering from the disease are best treated in an out-patient clinic, the necessity for isolation frequently occurs, and complicating diseases may arise which make hospital care urgent.

We should revert here to the statement previously made—that all infants and children in the hospital should be under pediatric control. In the physical arrangement to bring this about there should be considered the advisability of having as contiguous as possible the special facilities that may be needed. For example, it would be much better to have in the pediatric building, or as an adjunct to the pediatric wards, a unit for otolaryngological conditions in infants and children rather than to keep such patients in a ward or unit which is primarily for adults. The proper care and treatment of the child are the objectives, and in such work as otolaryngology, where the need is especially great, it is a good plan to assign members of the specialty staffs to duty on the pediatric wards. Certain special treatments in children seem to be performed better by the pediatrician. As an illustration of this may be mentioned the so-called syphilis or salvarsan clinic.

This discussion has sought to indicate those requirements that are more or less peculiar to the pediatric department. Little mention has been made, therefore, of those necessities that are common to all departments.

In conclusion, we desire to urge that diligent and special consideration should be given to the planning of the pediatric division of the general hospital. The peculiar needs of the child must be studied. Then when the tentative plans have been prepared, each nursing procedure should be visualized in order to be sure that it may be performed easily and that every facility necessary has been provided.

### Vancouver May Decentralize Its Hospitals

A tendency that is in direct variance with the present trend toward consolidation of hospitals, is the plan that is now under consideration in Vancouver, B. C., to decentralize the hospitals of that city, says the *Trained Nurse and Hospital Review*.

The plan appears to be to establish a circle of small hospitals, perhaps units of 200 beds, throughout selected areas in order to meet local community needs. The present Vancouver General Hospital would serve "as a central base for major cases involved in the scheme."



# Coordination: The Secret of a Smoothly Run Hospital\*

By STEWART HAMILTON, M.D.

Director, Harper Hospital, Detroit

**T**O COORDINATE departments, the first consideration is the layout of the building. The person who has watched with interest the rapid growth of hospitals will be struck with the progress that hospital consultants, working in conjunction with architects, have made in revolutionizing hospital planning for ease of administration, comfort of patients, reduction of noise and elimination of odors. The centralization of departments saves time in travel both in the collection and in the distribution of supplies. This is true of the operating room, the laboratory, the main kitchen, the serving kitchens, the laundry and the storeroom, as well as the nurses' stations on the various corridors, all of which should be centralized.

The location of the power plant is important. It should be in a separate building, centrally located and so placed that the prevailing winds tend to carry the smoke and dust away from the hospital buildings. Its arrangement should be such that the noise from it is reduced to the minimum, and it should be central enough to reduce the long runs of horizontal steam, of hot and cold water and of electric lines. The power plant should include all the machine, carpenter and paint shops, to facilitate the coordination of all repair work.

In the machine repair shop of Harper Hospital, Detroit, we have a large blackboard on which calls are entered for the plumber or electrician. The note so made is answered by the next man coming in from a call who erases it. A weekly

inspection of all faucets and radiators and minor repairs is made if necessary. This reduces the need for emergency calls and also saves many steps. Elevators are inspected weekly by the elevator company under contract, the hospital force filling in only in an emergency. Laundry equipment is inspected daily by the maintenance department. Machines are oiled at the same time, daily, by men who are familiar with laundry equipment. Electrical apparatus is inspected weekly.

At night the electrician on duty does ordinary plumbing jobs, such as relieving stopped sinks and making minor repairs. He is also charged with certain routine duties, such as oiling special apparatus and equipment. When it is necessary to set up machines at night the maintenance crew works overtime. The engine room is manned by stationary engineers and firemen on eight-hour shifts. In large cities, these positions are governed by city ordinance. In addition to keeping the machines and boilers running, they are also responsible for keeping the machinery clean and usually have sufficient spare time to do this.

The painter is responsible for the general upkeep of the building. Under him are the wall washers and a plasterer. The hospital is kept clean and is painted on a scheduled routine, except in emergencies. The painter has the finishing of repaired articles and handles their distribution afterwards. All the articles of furniture are stored under his care. He has charge of refurnishing any of the departments or of replacing articles while they are being repaired.

The master mechanic, head painter and car-

## The Server and the Served

**T**HE patient is the hub around which all the activities of the hospital revolve and any plan of organization must keep this fact prominently in mind. The ideal to be aimed at is that the patient should be entirely unconscious of the complexities of the machinery about him and that the service should be rendered without confusion or friction. The finished product of a hospital is a well and satisfied patient, who feels that everything possible has been done to return him to health without delay.

\*Read at the joint meeting of the Illinois, Wisconsin and Indiana Hospital Associations, Chicago, February 19-21.

penter constitute a committee that meets to discuss changes in the building. They report their findings to the director once a week. No changes are made or repairs done unless the request is accompanied by a requisition signed by the director or his assistant. Requisitions sent in from the various departments must be approved by the heads of the departments. They are then sent to the director's office where they are signed and sent to the various departments.

Frequently not enough thought is given to the equipment or arrangement of that important department of the hospital, the laundry. Needless to say, it should be central, to reduce hauling both to and from the laundry. Machines should be placed so that there is no loss of time or labor in the washing process.

#### *Speeding Up Operation*

With the new type of equipment now in use at Harper Hospital, the speed of operation is greatly increased. All laundry collected up until 1:30 p.m. goes out the same day. That collected up until 3 p.m. starts out of the laundry first thing the next morning. This rapid turnover decreases the necessity of carrying a large stock of linen. An additional saving is that, with modern equipment, we require two less employees in the sewing room for mending torn linen. This means not only a marked saving in money, but also less patched linen in circulation.

Another innovation we are trying is piecework on certain types of laundry. So far the results show a saving of \$8 a day. The work also is cleared up half an hour earlier. We believe we can extend this service. We are also securing a better grade of work. The linen is collected at each chute three times an hour all morning.

The general housekeeping departments deserve a separate discussion inasmuch as they are naturally divorced from the purely medical activities.

The dietetic department is in the charge of the dietitian who is a qualified teacher of home economics. She is also an instructor in the department of nursing. This dietitian has charge of all special diets and acts as a consultant to the medical staff in metabolic questions. The first assistant dietitian has charge of menus for the hospital personnel and the patients.

We shall next consider the general arrangements from the patient's point of view, starting with the admission office.

The admission office may be successfully handled by clerks especially instructed for this duty. Since the first impression that the patient and his friends have of the hospital is received at the admitting office, tact and sympathetic under-

standing of the case are of great importance.

The admitting office should be near the cashier's office, with the personnel under the direction of the office manager. This is the arrangement at Harper Hospital. After assigning the patient to his room, these clerks make out the entry card in triplicate along with the front sheet of the chart. A messenger is assigned to the admitting office whose duty it is to take ambulatory patients to their respective rooms. One copy of the entry record, with the first sheet of the chart, accompanies the patient to his ward or room. One record goes to the office for the information of the bookkeeper and one to the information office for the records there. The copy of the entry record that accompanies the patient follows him through the hospital, in case he should be transferred. It also follows him to the office on his discharge from the hospital. It then goes to the information office for use in closing the records there, and finally completes its travels in the chart room where it is filed. This arrangement greatly simplifies the finding of charts for study or for readmission. The chart room employees are under the direction of the assistant director and are responsible to him.

#### *The Routine of Admitting the Patient*

The patient is taken to his room by the messenger or by the ambulance employee and is accompanied by a note stating his status, which is given to the nurse in charge, who attends to the patient's immediate needs. In some cases, a slip with the physician's orders accompanies the patient. This is facilitated by the hospital's furnishing the staff with a sheet on which are all the informatory data the hospital requires for its records as well as a place for the doctor to write his immediate orders. These duties attended to, the nurse asks the telephone operator to find the intern on the section and she also notes the patient's entry in the book of patients. In the meantime, a slip made out by the admitting office is put in the physician's box notifying him of his patient's arrival and of his location in the hospital. On this slip is the hospital number, the name correctly spelled, the address, telephone number and the name and address of the nearest relative. Staff members generally keep these slips for future reference.

A rule of the hospital is that surgical patients are to be admitted before 4 p.m. the day before operation—emergencies excepted. This is done to give opportunity for a complete physical examination of the patient, the necessary laboratory work and the preparation of a complete history. Physicians are urged to instruct surgical



patients to stay away from all public gatherings for twenty-four hours before entering the hospital. We believe that this decreases the incidence of postoperative respiratory complications.

The coordination of departments in the final analysis depends upon the rules and regulations of conduct of the various departments. They must not be taken too literally in all cases and the personnel must always keep in mind the slogan, "The Patient First."

The board of trustees of most hospitals except federal, state or municipal institutions are selected for life and are responsible for all hospital activities.

The board holds monthly meetings and listens to reports of various committees relative to the policy of the institution. The board is further divided into various committees—executive, building, finance, training school—which investigate in detail the various activities of the hospital. These committees in turn report their findings to the board for action or ratification. The committee acts in matters requiring immediate decision or when the committee has been given power to act. The director or superintendent is the board's representative when it is not in session and he should meet with the board and act as secretary. The board should appoint members of the attending staff and heads of each department. These automatically constitute the executive committee of the medical staff. The board also dismisses members of the staff. The appointment, however, should be made on the recommendation of the executive committee of the medical staff. In recommending a new member to the board for appointment, the executive committee of the medical staff should first select individuals whose fitness for the position is considered rather than seniority or length of service.

#### *How the Staff Is Arranged*

The arrangement of the medical staff varies with the type of hospital, whether large or small, open or closed, but the basic principles to be kept in mind are uniform. The staff or medical board of Harper Hospital consists of a consulting staff, an adjunct staff, an active staff and a house staff.

The consulting staff is selected from men of extraordinary ability who, although not otherwise connected with the hospital, show an interest in its work and add to its efficiency. They are men who have retired from the active staff and who, because of their ability, may be of outstanding service to the hospital. Individuals on reaching the age of sixty-three years are retired from the active staff, but they are not necessarily put on the consulting staff.

The adjunct staff is made up of prominent physicians in the community, whose interests are not necessarily concentrated at this hospital, but to whom it is open for the care of private patients.

The active staff consists of physicians and surgeons, associate physicians and surgeons, assistant physicians and surgeons of the various departments and the out-patient department. They have charge of all patients whose expenses in whole or in part are paid from public or endowment funds. These are grouped under five main departments—medicine, surgery, obstetrics and gynecology, eye, ear, nose and throat (the modern tendency seems to be to separate ophthalmology from ear, nose and throat), and radiology and pathology. These are again grouped in various divisions, which constitute the various branches of medicine and surgery.

#### *Selecting the Chairman*

The trustees of the hospital at their annual meeting appoint the staff for the ensuing year. They appoint also the heads of each of the five departments and two other members from the staff at large. These constitute the executive committee of the medical staff. The newly appointed executive committee meets and elects a chairman who, in turn, becomes the chairman of the staff or chief of staff.

In some institutions it seems best for the staff to elect its own chairman, rather than to have the chairman of the executive committee automatically fill the position. If the staff elects its own president and if he, in turn, becomes automatically a member of the executive committee, it gives the staff a deserved representation in hospital affairs, without in any way weakening the control of the trustees over the professional personnel.

At Harper Hospital the executive committee of the medical staff has charge of the medical and surgical affairs of the hospital and may submit recommendations to the board of trustees as to the conduct of the medical department. The director is a member of the committee. This committee has power to appoint voluntary assistants to the out-patient department from month to month. This appointment is a try-out for the various individuals. These voluntary assistants have equal rights in the hospital with regular members of the staff, and it is from the voluntary assistant group that the staff is recruited.

The various departments of the staff are again grouped in divisions with a head in each division.

The house staff is appointed annually. It consists of juniors, seniors, assistant residents and residents. The intern staff is appointed from



graduates of Class A schools, upon application submitted on a special form. This form includes information relative to the health and social status of the applicant as well as his scholastic standing, and remarks from the dean of his medical school. The applicant, if he cannot present himself in person, sends his photograph with his application.

Junior interns serve one year, according to the requirements of the Michigan state law, which calls for a rotating service on medicine, surgery, pathology and obstetrics. This service is required of one who seeks a license to practice medicine in Michigan. Junior interns are under the ruling of the Michigan State Board as well as of the hospital authorities. Each intern is provided with a special booklet detailing his duties and service.

Senior interns are appointed from the outstanding juniors or other men who have served one year in a hospital. They contract to remain one year. They are in charge of the various services, and of the juniors on their sections. The senior interns are given an honorarium. One of the seniors is on duty all night and has charge of the medical service during the night for three months or less, at the discretion of the director. He receives an increased honorarium.

The residents are appointed from the outstanding seniors, or men who have served at least two years in an accredited hospital. The residents have charge of the juniors and seniors on their respective services. There is one resident in each department and there are as many assistant residents as seem necessary. There are also two dental interns. Senior residents in all departments are appointed after at least three years' hospital work, and after at least six months in pathology as assistant resident. Residents and assistants receive an honorarium.

#### *The Duties of the Resident*

Only those members of the intern staff who show special talents and who expect to devote the time and effort necessary to prepare themselves thoroughly for a specialty, are taken on as residents. It is expected that during their service they will receive adequate training in the specialty they select.

Each department has a resident and an assistant resident with as many seniors and juniors as are required to carry on the work of the department. Each minor surgical division, such as urology, proctology and orthopedics, respectively, are under the control of a senior intern.

The resident is in charge of the department as a whole. There are five residents, one each for

surgery, for medicine, for gynecology and obstetrics, for eye, ear, nose and throat, and for laboratory. In addition to his professional duties, the surgical resident makes out the operating room board and assigns hours to the various operating surgeons.

To aid in the assignment of operating time in the operating room, a study is made of the number of patients operated on by each surgeon for a year, showing the number of hours needed daily or weekly. Surgeons having the largest number of cases are given first choice of hours. This method of assigning operating time occasions little time loss between patients and less waiting on the surgeon's part. The younger surgeons usually operate late in the morning, from 11 to 12 o'clock.

#### *Serving of Trays Is Well Planned*

On the larger services, two rooms are assigned for each surgeon and his staff, which allows a greater number of patients to be operated on in a given time. Operating rooms are held ten minutes after the hour assigned and then turned over to the next group. The patient to be operated on is called for by an orderly from the operating room, with a signed order with the patient's name and number, the type of operation and other relevant information. This is presented to the supervising nurse on the hall, who puts the patient on the stretcher and sends the patient, together with his chart, to the operating room. In this manner, it is impossible for the wrong patient to be operated on.

Patients' routine diets are ordered by the nurse over the telephone from the diet kitchen in the respective units. Changes in diets may be made up half an hour before serving time. All routine diets, liquid, soft and full, and special diets are served from the unit kitchen, which is in charge of an assistant dietitian. She visits the patients in her unit and modifies the menus to their taste. This greatly reduces the special diets. All food is prepared in the main kitchen and no food, other than toast and an occasional poached egg, is prepared on the floors. Each floor has a specified time of serving. The trays are delivered to the patients on their arrival from the unit kitchen under the direction of the supervising nurse and her assistants. The trays, collected by the ward maid, are returned to the unit kitchen, garbaged and washed. No dishwashing is done on the floors.

Special feeding problems and quantitative diets are served direct to the patient by the student nurse under the supervision of the chief dietitian. The nurses also collect the trays and make the

necessary calculations and adjustments. All student nurses go through the diet kitchen training and make direct contacts with the patients receiving the diet. Special feedings are sent, labeled for the individual patient. Patients leaving the hospital are given full instructions as to restricted diets, if necessary.

The functions of the nursing department rest upon the purpose of the hospital. Its first function is the care of the sick. In many large hospitals with a large personnel, a supervisor is assigned to the various special services, such as the operating room, the obstetrical, the surgical and the medical. This supervising nurse must necessarily be a person of wide experience in the nursing field. She works in close relationship with the superintendent of nurses and her assistants.

The head nurse must primarily be a good bedside nurse. In order to give the care which is the patient's just due, she must be able to direct the services of the personnel assigned to her to attain the best possible results. She should possess poise and be able to direct and to inspire her staff. Her influence should promote the atmosphere of kindness, quiet and peace, and a feeling of confidence as soon as the patient comes under her care.

#### *How Various Departments Are Managed*

If results are to be satisfactorily obtained, the hospital must supply sufficient equipment, the care and economical use of which is the head nurse's responsibility. In ordering supplies, she should use careful judgment in order to foster the spirit of economical usage. The head nurse must familiarize herself, early in her service, with the special technique used by the various attending physicians in order to be competent to supervise the carrying out of their orders and to make intelligent rounds with the visiting men. The supervisor and head nurse necessarily are required constantly to use the utmost tact, kindness and patience to cope with the various problems that arise in connection with the affairs of the patients and their friends.

Orderlies should be under the supervision of the nursing department and in charge of a head orderly. They should be assigned by him to the various halls and operating rooms. When it is possible to segregate patients on typical women's surgical and medical floors and men's surgical and medical floors, the number of orderlies may be greatly reduced. Orderlies should receive training under the medical and surgical staffs in the technique of their various duties and should be responsible to the supervisor on the hall.

The pharmacy should be under the direction of

a registered pharmacist and as many assistants as are required. It should be so placed that it may serve the pharmacy out-patient department, when one exists, as well as the hospital. This reduces help, nonproductive floor space and cost.

Orders should go to the pharmacy daily for necessary drugs and medicines, and these should be filled and returned to the halls before noon. Special prescriptions should have preference, as in any kind of emergency. The drug lockers on the halls should be stocked quite bountifully so that it is rarely necessary for a patient to wait any length of time for an ordinary drug. The blanket charge system makes this possible and is an aid in the coordination of departments. High priced drugs should be charged for. These should be stocked on each hall in half-dozen lots and a charge slip made out when they are used for a patient. This slip should then be sent to the cashier's office where the charge is transferred to the patient's bill. The amount used should be replaced on the next daily order.

At Harper Hospital a page makes two-hourly rounds to pick up requisitions, notes and mail and also to deliver any orders or mail. This is a valuable aid in coordinating departments and makes it unnecessary for the personnel on the floor to leave it for minor matters.

In the pharmacy, after the needs of the hospital are cared for, the out-patient department prescriptions are attended to from 10 a.m. to 1 p.m. The afternoon is spent in replenishing the stock and in taking care of the extra orders. Under this system the pharmacy is open from 8 a.m. until 5 p.m. and for half a day on Sunday, one pharmacist being on duty Sunday mornings and holidays. Rarely do we need to send out for special prescriptions. The night supervisor has a key to the pharmacy which enables her to get serums and emergency medicines at night if necessary.

#### *Courteous Telephone Service*

The telephone office is important. Since it is one of the departments that the public is in contact with frequently, its organization should receive much care. It is one of the twenty-four-hour services and its slogan should be "A B C," "Always be courteous."

The telephone office should be placed where the operators are least disturbed. We have a chief operator, who supervises the regular operators, takes all long distance calls and helps on the board when it is necessary. The operator pages the staff and interns, the latter by an intern call system. When an intern's number appears on the call box, he calls the operator and she gives



him the message. The staff registers in and out at the switchboard, so that its calls may be intelligently handled. Physicians not registering are not paged.

The inside calls in the hospital are cared for by an intercommunicating automatic telephone system. This relieves the switchboard materially. All outgoing calls from the nurses' home are on pay stations, there being a pay station on each hall in the home.

Each patient's room is equipped with a connection for a portable telephone and patients are charged with outgoing calls. No outgoing calls are allowed from the telephones in the nurses' stations. The staff is charged for all outside calls.

#### *How Maternity Department Is Arranged*

The obstetrical department is so arranged that patients are admitted to labor rooms that are soundproof. Each patient has a room by herself during labor, regardless of whether she is booked for a ward or a room. This allows some member of the family to see the patient without interfering with the aseptic technique. The patient remains in the labor room until she is ready to go to the birthroom. After her delivery she is transferred to a floor for postpartum care, where she is not disturbed by new patients going through the early stages of labor.

The babies are cared for in a separate nursery room that is fitted for the purpose. There is a washroom on either side of the nursery, one for the use of pupil nurses and one for graduates. As we have graduates on duty from other schools whose technique is different from ours, we think it best to have separate washrooms. Each baby has its own locker with its own basin and equipment. There is also a contagious and suspect nursery to which the babies are transferred if any type of infection occurs. A plate glass window on the corridor side of each nursery allows the family and friends to see the baby without touching it and without taking up the nurses' valuable time.

We find four delivery rooms ample to take care of 100 beds in this department. There is a general obstetrical supervisor who has charge of the labor and delivery rooms and, subordinate to her, a supervisor on each division. Careful attention is given to an easy identification of the babies.

Laboratory orders are sent to the laboratory on special cards, on which are noted the name and room of the patient, the attending physician and the nature of the examination desired. The laboratory is open from 8 a.m. to 5 p.m., and is manned by the regular laboratory staff. After

5 p.m. and until 10 p.m., and also on Sundays and holidays, the laboratory is under the care of a single worker who cares for emergencies. This person also keeps the hospital library open.

The housekeeping department is under the direction of the hospital matron, who has as many assistants as she needs. The assistants are responsible for cleaning the hospital, for looking after the household supplies and for handling the linen. The matron arranges her schedule to fit in with that of the nurse supervisors on the halls as to the time of dressing and of the serving of the meals. General duty for maids is from 7 to 11 a.m. and 1 to 4 p.m., with an extra floater crew to make up rooms after hours and to do extra cleaning. The matron also has charge of the sewing room, where all uniforms are made. The linen is delivered to the linen room by the laundry and is delivered to the various halls on requisition. The matron requisitions all repairs and sees to the upkeep of the furniture and the furnishings that require replacement.

#### *Keeping Track of Food Costs*

All goods received in the storeroom are checked by the receiving clerks and a duplicate record is made of the receipts. The usual bookkeeping system keeps account of the stock. A card for each commodity is provided. At the left of the card is the name of the firm purchased from, the quantity of supplies purchased, the date they were received and the price paid. At the right of the card are three spaces—one for disbursements, one for total disbursements for the day and one for the balance on hand. All disbursements are deducted and all purchases are added to the balance on hand, thereby giving us a perpetual inventory. When invoices are entered in this manner, the prices are always available and any change in price or any apparent mistake may be detected readily.

Signed requisitions from the various departments and hospital divisions are sent to the store, where they are filled and checked. The heads of departments send for their supplies, while the store clerks deliver supplies to the divisions every morning for which the supervisor in charge signs. The supervisors requisition once a week. In case of emergency, they must have the requisition signed by the director of the hospital or the principal of the training school. These requisitions are then sent to the store office, where all commodities are posted, and the perpetual inventory carried out. The requisitions are priced and totaled. These prices are then recorded on a daily issue sheet which shows the amount disbursed to the various departments. The store



purchases are also distributed on this issue sheet and the sheet is then totaled.

As we use a food cost system, the entries of the total food purchased and the total food issued are carried over on a distribution sheet. On this sheet, three distributions are made—the diet kitchen, the main kitchen and the bakery. Under each, all food is classified, and from this and the food receiving record we get our total purchases and issues for all food commodities for the day. A meal census from all kitchens is posted in a book each day and a total is made at the end of the month. In the meal census there are five groupings—nurses and staff, help, private patients, ward patients and fluids. In another book is posted the price of each commodity, which is copied from the distribution sheet. At the end of the month, this is totaled and from these two records, we obtain the cost of each serving. This necessitates knowing every recipe and portion of food used in each serving, such as all salads, soups, omelets and desserts.

After obtaining the average cost for one serving, it is multiplied by the total number of servings of all private patients, ward patients, fluids, help, nurses and staff. This is totaled and divided by the number of servings for each group which gives our average cost per month. To this is added the cost of service per meal, which is obtained by taking the total cost of the diet kitchen, the kitchen and the bakery pay rolls, the kitchen expense, one-third of the store expense and one-tenth of the administration expense and dividing it by the total number of meals. This is added to the average cost of meals, which gives us the total average cost of meals.

A daily report of profit and loss is given to the director every day.

### 6,665 Hospitals on Approved List, New A. M. A. Register Shows

The March 29 issue of the *Journal of the American Medical Association* presents the ninth annual compilation of data concerning hospitals approved by the American Medical Association and the third publication of the list of approved hospitals which is known as the "Hospital Register."

The 1928 list of approved hospitals shows 6,665 registered hospitals or 187 fewer than were registered in 1928. But the record shows an increase of 14,199 beds over 1928. The decrease in the number of hospitals is said to be due to consolidation or, in some cases, to ethical reasons that prevented several hospitals from being included.

These 6,665 approved hospitals cared for a daily average of 726,766 patients. Babies born in hospitals last year numbered 621,896. The rate of occupancy, or proportion

of beds constantly in use last year, was 65.5 per cent—the lowest since the annual census was begun nine years ago.

The list shows also 629 hospitals, with a total capacity of 181,835 beds, approved for intern training. Training is thus provided for 5,310 interns. At the present time 98,491 physicians are connected with hospitals, either as staff members or in other capacities.

#### *Private Hospitals Decreasing in Number*

According to the *Journal*, the present trend appears to be toward the withdrawal of private enterprise from the field, and toward the increase of county and city hospitals and those maintained under independent corporation control. Also the capacity of state hospitals for the mentally ill has increased by 83,498 beds, although the number of such hospitals has decreased from 601 in 1923 to 578 in 1929. The average number of patients and inmates increased 102,202.

The number of maternity hospitals is decreasing, which means that general hospitals are more and more caring for obstetric patients.

That fewer hospitals are also being incorporated for profit, conforms to the growing conviction that an institution whose object is the care of the sick and injured should not be conducted for profit.

"The present edition of the register is believed to be free from undeserving hospitals," the *Journal* says. "Now it clearly shows that all hospitals are approved for the general care of patients if their names have been published in the register. The Hospital Register makes it possible for a hospital, regardless of its size, to be recognized as an approved institution if it has the essential qualifications."

#### *How to Get on Approved List*

These qualifications are:

A staff made up of one or more properly qualified physicians who shall be graduates of reputable medical schools; and all physicians treating patients in the hospital must be so qualified.

An able management which, depending on the size of the hospital, may be in the hands of a competent physician, an able superintendent or a board of trustees.

A competent physician-pathologist, either on the staff or easily accessible, who should examine and keep a careful record of tissues removed at all operations conducted in the hospital.

Careful histories and records of all patients admitted to the hospital with which should be filed reports of any laboratory analyses, roentgen ray findings or pathologic reports of any tissues examined.

One or more competent nurses, depending on the average number of its patients.

Regular staff conferences, at least monthly and preferably weekly, in all hospitals having staffs of three or more physicians. At these staff conferences complicated cases in the hospital should be considered, as well as all deaths occurring in the hospital during the period intervening between meetings. If necropsies have been held on any of these patients, these especially should be given discussion in which antemortem and postmortem signs, symptoms and observations should be compared.

Hospitals are institutions which should not be conducted for profit but for the purpose of securing better medical service for the community and they should always be conducted in accordance with the code of ethics of the American Medical Association.

# A Suggested Scheme for Buying Supplies

By JAY R. RHOADS

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**A**LTHOUGH the urge toward cooperation in purchasing is not so insistent as was the necessity for the united action of which Franklin spoke when he said, "Let us all hang together or assuredly we shall all hang separately," nevertheless the principle of combined strength was one of the first lessons learned by our ancestors.

It is not the purpose of this discussion to attempt to bludgeon the theory of cooperative purchasing, but rather to point out a few fundamental industrial and commercial facts that must be recognized before the bud of truth which is present in all cooperative purchase schemes can attain the full bloom of perfection that is promised in theory. When we examine critically the efforts that have been made toward cooperative purchasing we arouse defenders at once. But since critical examination is one of the best means of arriving at truth, we shall have to risk it. What, then, are some of the characteristics of the schemes that have been tried?

## *Two Classes of Organizations*

An impartial and perhaps somewhat uncharitable observer might be led to say that the members of some cooperative purchasing agencies "cooperate" mainly in paying the expenses of the central buying office. Of others it has been found true beyond doubt that, although the members pay dues and feel that they have a stake in the game, the moving spirit behind the enterprise is none other than a dealer or broker indulging in masquerade. This dealer or broker, in addition to having his expenses paid, is reaping a profit or commission, which is concealed, perhaps, for the good of the cause. These we shall mention, however, only in passing to a consideration of those agencies that are operating honestly and perhaps achieving results in proportion to their degree of knowledge, ability and efficiency.

Such purchasing organizations fall into two classes, the first of which is typified by the agencies of the federal government and perhaps of several of the largest states. Their individual purchases are ordinarily enormously large since

they represent the combined requirements of a great number of institutions for a period of perhaps six months, and the quotations they obtain are correspondingly low. It is to be noted, however, that such purchasing agencies are merely one phase of a rigid system of financial and management control imposed from above, and that that control implies a strict standardization not only of materials and supplies but of almost every activity within the institutions. Such a method of purchasing is, therefore, hardly adaptable to a group of independent hospitals with varying requirements and individual preferences and traditions. Nevertheless, since government purchasing is frequently held up as the *ne plus ultra* to be aimed at by every cooperative purchase plan it may be well to examine it more carefully. Is government purchasing the perfect flower it is commonly supposed to be?

Any person who investigates government purchasing without previous acquaintance will be somewhat astonished by the names of the successful bidders on a large proportion of the contracts. Under the theory that open competition parallels nature's law of the survival of the fittest, one would expect to find in the lists of contractors only those firms or manufacturers who are definitely the leaders in their respective fields, whose ability as manufacturers has carried them to the top. A list of successful bidders ought in all reason to resemble an industrial "Who's Who." That there is a sprinkling of such names is not denied, but the discouraging fact is that a great many of the names appearing repeatedly as successful bidders are practically unknown, and a casual reference to Dun or Bradstreet will cause one to wonder where and how they find the capital to finance their contracts.

## *The Reason for Such a Condition*

Why should such a condition exist? First, because many of the most successful and most reputable manufacturers find it easier and simpler to sell their products in the open market than to thread the maze of red tape that usually surrounds such contracts. Second, because they find



themselves too often outbid by more or less irresponsible speculators, selling what they do not own and merely hoping by dint of intensive shopping or a reversal of market conditions to be able to complete their contracts. Third, because the rigidly established standards and specifications too often lag behind the best industrial practice. A product that is 50 per cent better than specified will not be favored by so much as a fraction of a cent.

#### *A Glance at Central Bureaus*

Whatever the reason may be for the lack of participation by outstanding manufacturers, a system of purchasing is not entirely without blemish if it favors mere opportunities at the expense of reputable concerns. From one point of view it may be thought desirable, for public or political reasons, to establish an expensive system of specifications, checks and inspections that can be held as an umbrella over the head of the purchasing agent to protect him against criticism, and against the responsibility of really purchasing. But let it not be thought that such a system always, or even often, results in the expenditure of money to the best possible advantage.

Let us now take a brief glance at central purchasing bureaus established to serve institutions that otherwise are entirely independent in operation and control. The first fact that faces such agencies is that their members will not permit themselves to be standardized. It is not, in fact, desirable that they should. It is quite logical and legitimate that hospitals operating under different conditions should have different requirements. But the whole picture is changed, for the bureau cannot make a group purchase large enough to attract low bids from leading manufacturers or distributors.

What is the result? The result is that the buying office degenerates into a mere clearing house for individual inquiries, individual orders and price information. It accomplishes nothing beyond the mere clerical work of issuing proposals, tabulating bids and awarding orders. I have heard it argued that that is enough; that to buy goods at the lowest possible dollar it is only necessary to broadcast the news that you intend to buy. But it is not enough and, in any event, the clerical work could without doubt be done more cheaply by the individual hospitals.

The cost of handling and shipping an order for a single institution is certainly not reduced by having that order issued by a central bureau. "Ah, but that selling cost," someone says. "A man need only sit behind his desk and fill out quotation forms." The cost of selling, sad to re-

late, also remains about the same. The most obdurate purchasing agent is amenable in some degree to "selling pressure," and the orders commonly go to those who exert it in the most acceptable form. Any saving, therefore, that such an agency is able to make by means of highly competitive quotations is either deducted from the dealer's net profit, or it represents a portion of his costs he has arbitrarily thrown overboard.

As to the profit, the belief is prevalent that business exacts an unreasonable toll. If the modern robber barons of industry would only disgorge we could all be happy. Those who hold this opinion see only the large final figures and do not realize the extent to which modern business depends upon a small profit on each transaction, many times repeated. The largest meat packer collects a profit of only one-fourth cent a pound for all the important services of his great organization. Most businesses are constantly skating on thin ice, and in staple articles especially the net profit of the manufacturer or dealer is a negligible portion of the price. Cooperative purchasing, if its success must depend upon cutting into profits, can never pay its own expenses.

Since net profits are ordinarily small any appreciable price advantage the buying office can obtain on an individual order of average size must represent a sacrifice of cost on the part of the seller. His true cost is of course the cost of the physical article itself, plus the expense of his organization in performing the service. This latter he will frequently sacrifice, although he would have difficulty in explaining his reasons. But if he makes a policy of sacrificing cost when competition is keen, he must, if he is to maintain his small net profit, make up those losses in some other quarter.

#### *Seeking a Way to Lower Prices*

The net result of the successful operation of our hypothetical central buying office is to raise the prices other purchasers must pay. That might not, under certain conditions, occasion much grief. If it were possible to benefit the hospitals at the expense of some persons or things we heartily dislike there would be cause for congratulations. But the hospitals constitute a closely knit, compact group that requires a great degree of specialization in both product and services. Most of the money it spends for supplies goes to firms who are busily engaged in soliciting the entire hospital field. Therefore, the savings, if any, of a cooperative group such as we have been considering are more than likely to be assessed upon nonmember hospitals and, no matter what the immediate benefit to a small group, the broad



problem of holding to a minimum the expenditures of the hospital field as a whole is not solved in any sense.

What is the solution? Unfortunately, as in most complex problems, there is no ready-made answer, no cure-all. But that need not prevent our making an attempt to solve the problem with the hope that by reducing the question to its lowest terms some glimmer of light may shine forth.

It is one of the anomalies of American industry that while tremendous advances have been made in the technique of manufacture so that goods are being produced more and more cheaply, the advantage of low cost mass production is being dissipated to a large degree by the steadily mounting cost of distributing those same goods to the ultimate consumer. When you purchase an article at retail it is probable that you are paying more to have that article placed in your hands than to have it made, this in spite of the fact that no one through whose hands it has passed has made more than a nominal net profit. The cost of distributing in wholesale quantities is much less of course, but the disturbing fact is that it has doubled (in percentage) in the last twenty-five years. Obviously there is a great economic waste in such a condition, but the question is where and how to eliminate it. If that question can be answered by any kind of co-operative action the road to lower prices is opened.

#### *The Cost of Competition*

Paradoxically, much of the wasteful cost of distribution is directly due to intense competition, which is generally supposed to reduce prices. The successful retailer must display along with his goods a liberal expanse of fine woods, metals, glass and stone upon which a great deal of really artistic effort has been lavished. Along with his goods he sells "atmosphere" and his customers must pay for it. The manufacturing or wholesale distributor must, as competition becomes more rigorous, spend a greater amount of time and money in outwitting his competitors and in bridging the gap between buyer and seller. His ambassadors, the salesmen, must call on each customer more frequently. Because they call more frequently, their average order is smaller and therefore more expensive to handle, and their expense for traveling is greater.

The distributor must intensify his effort to spread his message, whether it be by train or motor car, by mail or telephone, on foot or on horseback or by the printed word. He must meet or beat his competitor in discounts, in a wide range of stock for selection, in quick and con-

venient delivery and in "service." His business, as it becomes more difficult, becomes also more expensive, and it follows that either he adds all these costs to his prices or he makes a quick exit by way of the bankruptcy court. If you were to place end to end all the lost time and motion, the useless bickerings, the attacks and defenses of the war of competition, they would reach from here to infinity. This war costs in any one year more than any military war ever fought. Any distributor would be glad to simplify his business and eliminate many of these costs for his customers' benefit, but he cannot. Both he and his customers are caught in a vicious circle of waste.

#### *A Suggested Solution*

Now if it is the object of our cooperative group to reduce the prices they must pay, why should it not apply the effort to reducing the costs and expenses of the manufacturer or dealer? We have seen that this is not accomplished by cooperation among a group of buyers merely. But it can without doubt be done by means of proper co-operation between that group of buyers and a manufacturer. Is this statement startling? Possibly, but it should not be so. There is nothing more logical than that buyer and seller should sit down together and solve their problems to mutual advantage rather than face each other across a chasm of suspicion, distrust and doubt.

The world of commerce is, I believe, more nearly prepared for this step than are its customers. Most forward looking men of business know that a sale that is not in some measure mutually advantageous is not a good sale from a long range view, and the time may not be far distant when any other attitude will be completely outmoded. The man who selects an attorney or physician does so with an approximate knowledge of his ability and of the value he himself places upon it. Thereafter he asks only that the attorney or doctor place all of that ability at his service. In these professions open competition for clients or patients is not expected or sanctioned. If there is mention of professional ethics, I reply that the world of commerce is rapidly grouping itself by industries and formulating codes of ethics for its own self-government. In the near future we may reasonably expect that commerce will not be so much less ethical than the learned professions, nor for that matter much less learned. All of the modern trend is in that direction.

It remains then to say by what means all this is to be accomplished, to indicate some of the steps along the way.

1. Since the conditions surrounding the man-

ufacture, sale and use of different commodities are totally different, it will be useless to search for a fixed plan of organization or operation that will fit all cases. Our plan is likely to be far less formal in organization and far more effective in practice than any cooperative purchase scheme that has ever been tried.

2. It follows that the work will be subdivided by classes of commodities the hospitals will purchase under entirely different plans, each one fitted to the peculiar conditions surrounding that commodity. Soap, sutures and sheets could neither be bought well nor sold well by one man or one organization, nor under identical cooperative plans.

#### *Shall Industry Take the Lead?*

3. If the hospital field should have the good fortune to see such a plan tried, the leadership and initiative could reasonably be expected to come from industry. This is the way of progress. The great advances in the sciences of medicine and hospitalization did not come as a result of an organized demand from laymen; they were initiated and carried through by hard working men and women within the professions themselves who had a realization of their existing shortcomings and a vision of their future possibilities. So it is with business: real progress is made from within.

Within each narrow group of commodities, then, the hospital field faces a need for some qualified manufacturer or dealer (preferably the former) to come forward and state his case. The proper man, or organization, will already have a close knowledge of the many wastes now present in the distribution of his own product. He will have given many hours of study to the problem of minimizing these, and he will have a definite idea of how best to direct an attack against their weak points. He will be able to state, from his own direct knowledge, under what exact conditions he can manufacture and distribute his product to a large group of hospitals with the utmost economy, and of course in a way acceptable to them. His close acquaintance with that particular commodity will provide invaluable guidance. He may even perform the detailed work of organizing the group with a minimum of expense by utilizing his own organization. In short, it will be his function to devise the whole plan and method of operation for his particular commodity.

He will frankly expect a profit for his services. Because he is bearing the risk, expense and burden of a revolutionary experiment, it is even possible that he will hope for a somewhat larger

profit than usual. That would not be scandalous, for the fact is that he will be more than pleased to accept as his profit a ridiculously small percentage of the amount the hospitals will save through the operation of his plan.

The primary requisite is that he must be properly qualified. He must have a vast background of experience, not only in the manufacture and sale of his commodity, but also in the requirements and practices of hospitals in relation to it. His product, even though it be one article only, must be manufactured in sufficient variety of grades and types to meet the varying needs and preferences of a large number of individual hospitals so that a strict and odious standardization will not be necessary. He must, and this is by no means secondary in importance, be ultra-modern in his views of business ethics and of the true relationship between buyer and seller.

This suggested plan is, without doubt, visionary and idealistic, but so are most efforts toward improvement until we realize suddenly that while we have been calling them visionary they have become accomplished facts. The plan will be tried sooner or later, since reason points in that direction. Whoever tries it, provided he is properly qualified, will deserve confidence and support, and the hospitals as a group will owe it to themselves to offer wholehearted support.

### The Difference Between Private and Proprietary Hospitals

That the term, "private hospital," frequently used to designate proprietary hospitals, is decidedly ambiguous, is pointed out in the Cleveland Hospital and Health Survey.

The distinction between private and proprietary hospitals is explained as follows: "Proprietary hospitals are those conducted as corporations for the profit of their owners. The word 'private' is sometimes employed to indicate a hospital supported by private funds as distinguished from a state or a municipal hospital. In another sense, a private hospital is taken to mean one that receives only private patients of certain physicians and no ward or 'staff' patients. In a third sense, the word 'private' is applied to a hospital which is conducted as a private business for profit. To use the same word 'private' for a hospital that is performing a great amount of public service rendered alike to those who pay and those who do not pay, as for an institution that is run as a business enterprise, involves dangerous confusion.

"The term 'proprietary' makes the proper distinction. This term, however, is not necessarily one of reproach. It is perfectly legitimate and proper for an individual or a corporation to maintain a hospital for profit, as a business enterprise. Such an institution corresponds to a 'private school' or 'academy' and may be as well conducted and as useful to a limited circle of patients as are many well known private schools to their clientele."



# Novel Design Municipal for Brooklyn's Hospital



BY J. G. WILLIAM GREEFF, M.D., COMMISSIONER OF HOSPITALS, LEROY P. WARD, ARCHITECT,  
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**T**HE new main building of the Kings County Hospital which is being erected at Clarkson Street and New York Avenue, Brooklyn, N. Y., marks the crowning achievement in the growth of a metropolitan institution which is almost a century old. The origins of Kings County Hospital were lowly, and the first town poorhouse which was established at Jay and Bridge Streets in 1808 gave little hint of the huge hospital that subsequently developed from it.

In 1824 the poorhouse was moved to Fort Green and at this time mentally afflicted patients as well as the ordinary sick were admitted and cared for. In 1830 the grounds of the present site of Kings County Hospital were purchased, and in 1831 the corner stone of the first hospital building was laid. Important new construction took place in 1837, in 1850, in 1852 and again in 1869. In 1891 patients suffering from contagious diseases were removed from the main hospital buildings and given separate quarters. In 1896, the care of the insane, up to that time a charge of Kings County Hospital, was taken over by New York State. A training school for nurses was inaugurated in 1897. It was not until 1920 that almshouse patients who were able to work were placed elsewhere.

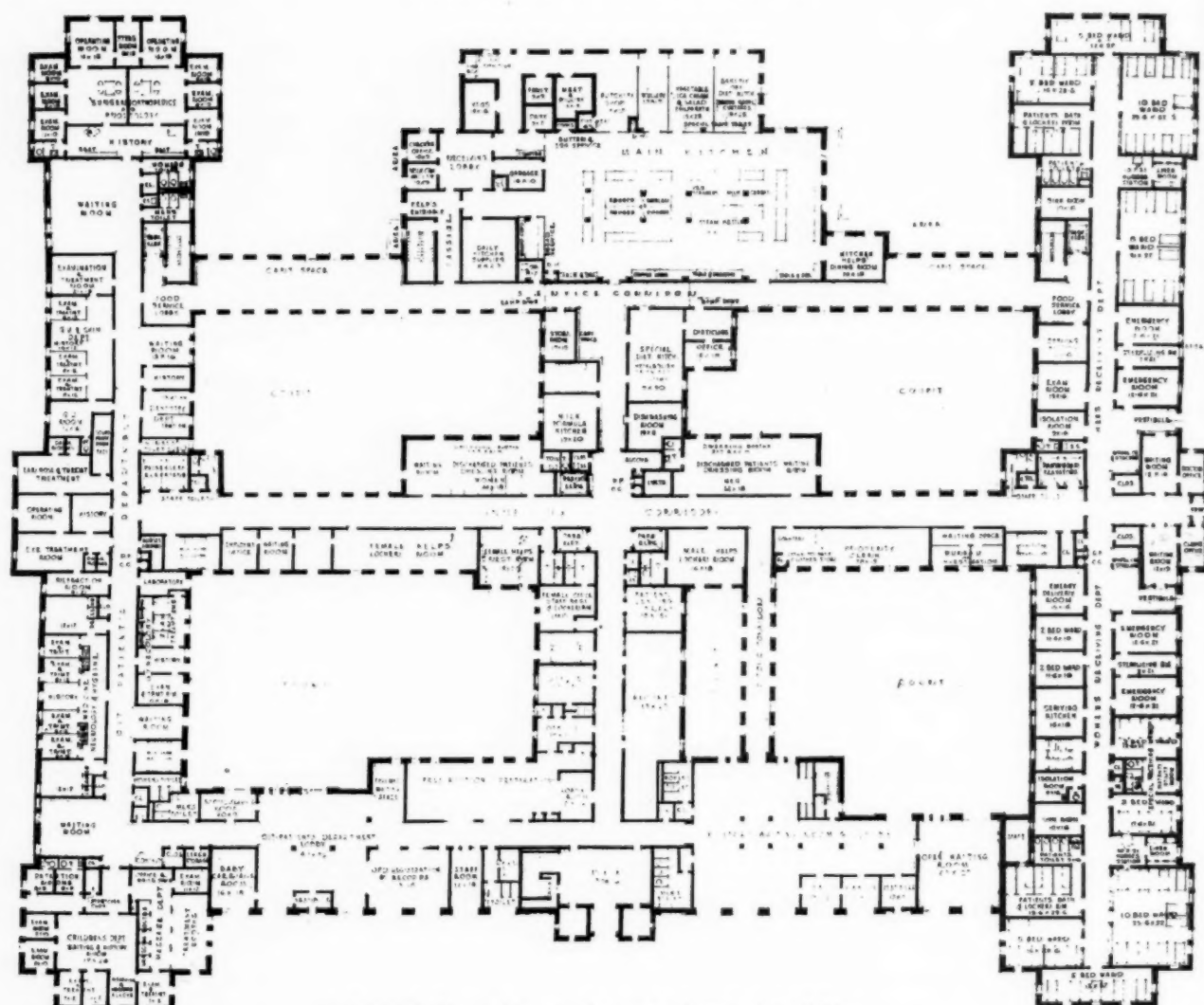
The present rebuilding of the Kings County Hospital is an event of no inconsiderable importance in the history of New York City's municipal enterprise. The only municipal hospital that

can be compared in importance with Kings County is Bellevue. Although boldly conceived as a whole, the Bellevue project has been carried forward piecemeal under the limitations of partial appropriations made from time to time, and is still far from completion. Brooklyn is to be more fortunate in its great municipal hospital enterprise, in that the latter, or at least the central sections of the hospital, have been contracted for as a single building operation.

The placing of the new central building on the ample hospital grounds has been carefully considered, so that full advantage might be taken of the natural landscape possibilities. The building, its main façade on Clarkson Street, will be located about 120 feet from the thoroughfare, thus ensuring relative freedom from street noises as well as providing an opportunity for a spacious landscape treatment. A stone paved terrace, 40 feet wide, will extend the full length of the façade. The present grounds are richly endowed with tall and shapely shade trees and as many of these will be conserved as is possible. New trees and shrubs will be planted, and this planting combined with the lawns and winding paths will give a parklike quality to the grounds.

The building itself presents an original architectural composition both in mass and detail. Its plan has been studied so that the free exposure of the wards to sun and air may be ensured, and short lines of corridor in the communication guar-





Ground floor plan of the main hospital building.

anted. The style of architecture employed is "modern" in that the consideration of function has been uppermost in the design of the building. And while the term "modern architecture" is a confusing one, it may safely be said that the simple wall surfaces and the fenestration used throughout admit of greater elasticity in meeting the exigencies of modern hospital planning than do the less flexible styles, whether these be Roman, French Renaissance or colonial, all of which are more or less bound by the use of special motifs for their proper expression. The style of the architecture of Kings County Hospital is the natural outgrowth of an attempt to meet the conditions of hospital planning frankly and simply.

The walls will be of variegated rose colored brick of rough texture. The stone trim, used sparingly, will be warm gray limestone. The base of the building will be of pink granite. The tower roofs will be covered with rough-texture tile, varying in color from buff to reddish brown. The porches have been given a distinctive treat-

ment and will be constructed of metal of decorative design.

This new main building has a frontage of approximately 415 feet and a depth of approximately 320 feet. The plan shows a high central unit flanked by high wings. The central portion and two wings are connected across the front and elsewhere by low units. Each of the wings is approximately 110 feet high and the central unit of the building is approximately 150 feet high. Above the flat roofs rise towers with sloping roofs, the central tower dominating the composition as a whole and containing water tanks, elevator machinery and ventilating blowers.

The building is of standard steel frame construction with solid brick curtain walls and tile furring, thoroughly waterproofed. The floor construction is generally of cinder concrete arch construction, the finished floors of terrazzo, tile, linoleum and rubber tile, the choice of materials depending on local need and function. The walls and ceiling will be plastered throughout. Ceilings will be suspended, ensuring the concealment of

piping which has, however, been made generally accessible. Tile wainscot will be installed in service rooms, toilet rooms and operating rooms. In the treatment of entrance halls and waiting rooms an effort has been made to achieve a combination of taste and practicality in a manner suggesting hospitality. The mechanical equipment of the building will consist of a steam heating system, high pressure steam system for sterilizers and other equipment, electric systems for power and light, call systems, electrocardiograph and portable x-ray outfits.

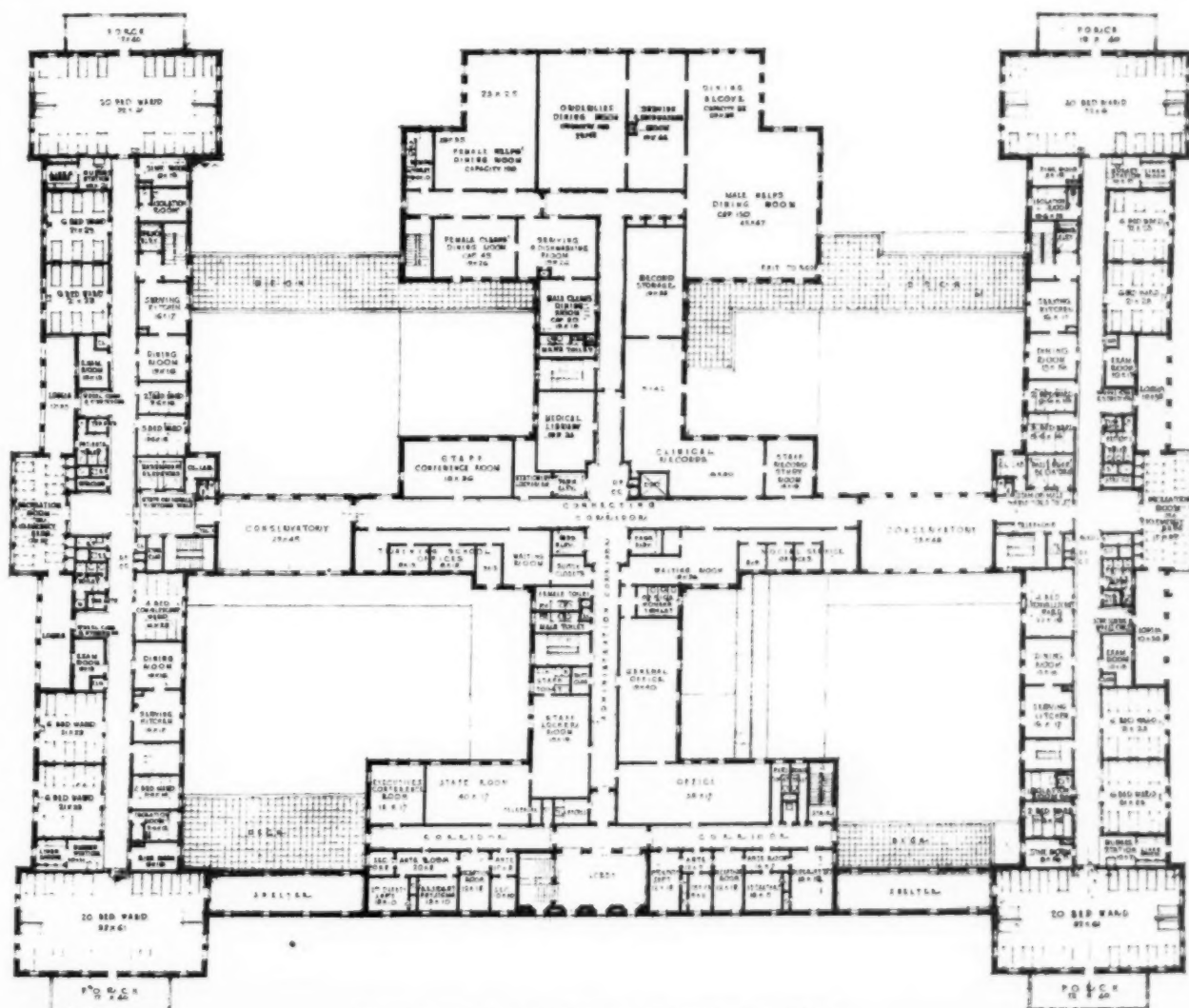
The patients will occupy the three major buildings of modified I shape, which will be assigned, respectively, to men, women and children. Their long axis extends from north to south, and the distance between the buildings is so great that direct sunlight will enter every ward.

### Outdoor Treatment Stressed

Facilities for outdoor treatment have been emphasized to an unusual degree. It is not an uncommon thing to find in connection with a hos-

pital ward a single veranda or loggia. At Kings County, each ward has two separate outdoor spaces—one directly connecting with the main ward, the other adjoining a spacious enclosed sun room. Thus the classification of patients into those who are acutely ill and require the constant supervision of nurses, and those who are convalescent and do not need the same degree of intensive care, which is frequently made in the planning of hospital wards, is extended in the Kings County plans to the outdoor sections of the hospital as well. This separation of the acutely sick from the convalescent constitutes, it is believed, an important contribution to effective therapeutics as well as to the comfort of the sick.

The arrangement of the hospital wards in adjoining pairs is another distinctive feature of the Kings County plans. The object is to provide an intermediate section between each pair of wards, which may be assigned at need to one ward or to the other, depending upon the pressure to which the individual ward is subjected. In municipal hospitals, more than in hospitals of any



First floor plan of the main hospital building.

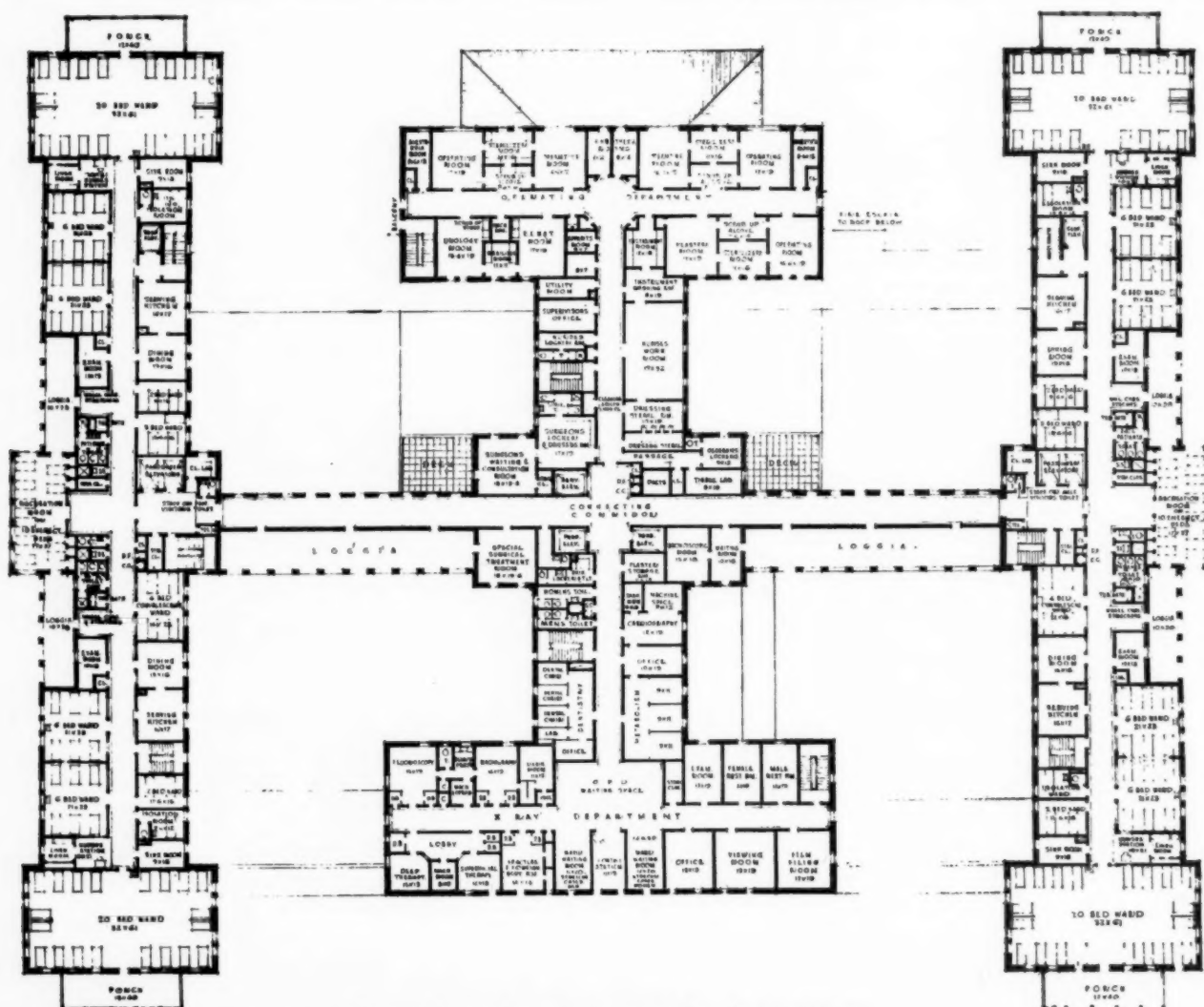
other description, the demand for hospital beds in the various wards and departments fluctuates widely, for municipal hospitals are obliged to provide accommodations for all who apply. It is the privilege of the private hospital to reject or to refer to a city institution a patient for whom accommodations cannot conveniently be provided. The municipal hospital cannot do this and where municipal hospitals have been built according to an inflexible plan the result has been either a loss of proper clinical classification and of the orderly handling of patients, or the overcrowding of certain wards while others were in part unoccupied. At Kings County, fluctuations in the demand for beds in any ward can be cared for in an orderly way. It is believed that these arrangements will result in superior care for future Kings County patients.

Connected with each typical ward unit are a number of small wards and separation rooms to which patients whose needs require it can be removed. All of the larger wards are exposed to light and air on three sides. Direct connection

with the outer air is provided in at least two sections of every ward corridor. In no case is any important service room removed so far from the patients to be served as to put any excessive burden upon the nurses. For special examinations and for treatments that cannot with propriety or with maximum comfort be carried out in the wards themselves, treatment rooms have been provided. Every ward unit has at least one room of this character. Convalescent patients who are out of bed will not be obliged to eat their meals in the sick room but will be served in the small convalescent dining rooms attached to the wards.

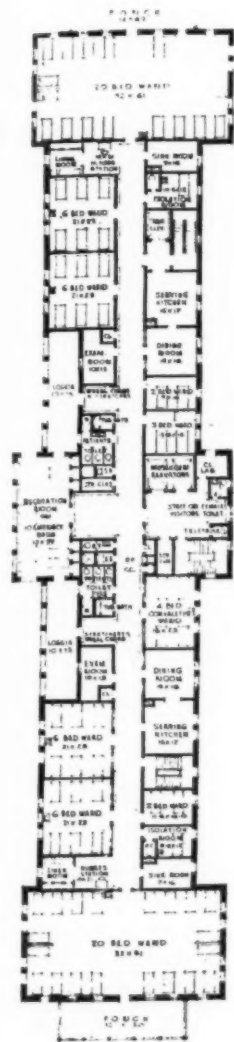
In addition to all the comforts which, without extravagance, are provided in connection with the ward services, the patients will have the full use of wide roof spaces where there will be glass enclosed sun parlors, covered shelters open at the sides and wide uncovered deck spaces suitable for use in fine weather. Special arrangements for heliotherapy are made on the roof of the children's section.

An important feature of the new hospital build-



Second floor plan of the main hospital building.

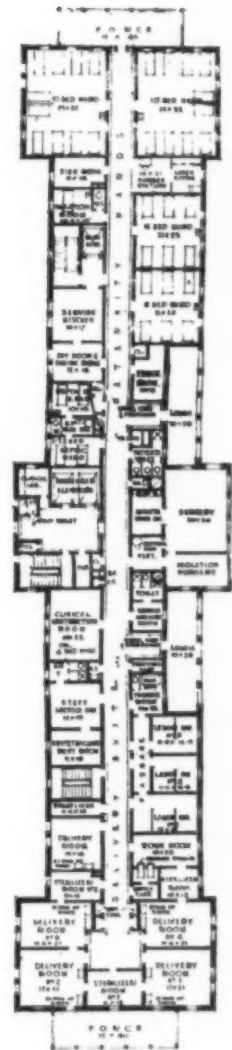




SEVENTH FLOOR



EIGHTH, NINTH, TENTH FLOORS



ELEVENTH FLOOR

ing is the receiving ward. In the center is a pleasant reception room flanked by examining rooms for men and women, respectively. Adjoining are the ambulance entrances connecting directly with the examining rooms just mentioned, and also with emergency operating rooms. Separate receiving wards are provided for men, women and children. Every precaution has been taken for the individual care of incoming patients. For cases of doubtful diagnosis there are isolation rooms. The receiving wards are subdivided into small units, each bed being protected either by an arrangement of cubicle partitions or by hung curtains.

On the ground floor of one of the major wings, directly opposite the receiving wards, provision has been made for a classified out-patient service. In the arrangement of the out-patient department, or dispensary, the needs of each clinical department have been separately considered in consultation with the hospital staff. Space assignments have been made with due regard to the relative attendance in the various departments, allowance

being made for the rapid expansion of this service which is almost certain to take place upon the completion of the new building, with its humane plan and attractive facilities. The waiting rooms in the dispensary department are not the dismal corridors that one finds in many dispensaries, but are small pleasant spaces open to light and air.

In the children's department of the dispensary individual cubicles are provided for children and for their mothers or others who may accompany them. Connected with the surgical clinic is a series of individual examining and treatment rooms. For the medical department, quiet examining rooms have been arranged, where thorough physical examinations can be made. For the gynecological and maternity departments there are specially arranged dressing rooms. The eye, ear, nose and throat department and the dental department will be as well equipped as any departments of this kind in the city.

At the front of the building are three main entrances. The central entrance leads to the administrative department. To the left of this is the

out-patient entrance, to the right the general hospital entrance. The reception rooms for visitors and for ambulatory hospital patients are ample in size and will be attractively decorated. Ample provision has been made for a sufficient number of information clerks to afford prompt and courteous treatment to patients and their friends. A visitors' corridor leads directly from the entrance hall to the main cross corridor, which in turn affords direct access to the three central elevator stacks by means of which the wards are reached. Nowhere, so far as is known, in any hospital of equal size are the lines of communication so simply arranged as at the Kings County Hospital.

#### *Ample Provision for Sun Treatment*

The children's wards are highly subdivided and include ample sun rooms, the special department of heliotherapy already mentioned, and loggias and deck spaces in abundance. The first of the children's wards is a specially planned detention or receiving ward. On each of the children's floors there is a section especially equipped for the care of infants. A milk formula room serves this department. Connected with each pair of wards is a clinical laboratory. Waiting alcoves for visitors are provided at the entrances to all the wards.

The maternity section, one of the special features of the new hospital, will occupy the uppermost floors of the women's building, remote from any other department of the hospital and affording the utmost quiet and privacy. The labor and delivery rooms have been soundproofed and will be finished in a sanitary manner.

#### *Therapeutic Center Featured*

An outstanding feature of the entire scheme is the second floor of the central structure, which might be described as the therapeutic center of the entire plant. Here, at the north end, are the major operating rooms of the hospital, eight in number. South of the central connecting corridor, which joins the three major wings of the hospital on the ground, first, second and third floors, are the x-ray department, dental department, department of electrocardiography and the metabolism rooms. In addition, there are special treatment rooms adjoining but just outside of the major operating room section, for minor operative cases and for the surgical treatment of ambulatory patients. The exclusion of this latter type of patient from the operating corridor proper will assist in maintaining perfect asepsis for major surgical work.

On the third floor of the central section, space has been reserved at the north end for a fully

equipped department of physiotherapy and for occupational therapy. At the south end a series of rooms has been set aside for a group of the resident staff who will be available at all times, day and night, for emergency duty. This latter provision is considered of particular importance because of the comparatively remote location of the principal staff house.

Other features of the hospital that might be described at length, if space permitted, are kitchens, dining rooms, offices and storerooms. The kitchen is centrally placed and is but a short distance from the service elevators. The dining rooms for the help are above the main kitchen.

The central clinical record room is of sufficient size to accommodate the accumulating clinical histories of the hospital for many years to come. The importance of a room of this sort in a convenient location, avoiding the storage of records in remote cellar spaces, will be appreciated by hospital administrators who, in other institutions, have long felt the need of adequate accommodations for this department.

Patients' clothing will be hung in individual bags in large and well ventilated basement rooms. Facilities have been provided for the sterilization of mattresses and clothing.

#### *Capacity and Cost*

The new building, which will have a normal capacity of 1,500 beds, and which will readily accommodate, without crowding, from 200 to 300 patients more, is to take the place of ancient structures that are not fire-resistive. Remaining on the hospital grounds, however, are two older patients' buildings of a fairly substantial character, and it is the present intention of the department of hospitals to assign these buildings to chronic cases—one for men and one for women. All of the acute clinical services will be cared for in the new main structure or structures, where every needed scientific aid will be close at hand.

The contract price for the erection of the structure, including necessary preparatory work but not including the mechanical equipment (for which bids are not yet in) is \$3,869,000.

Closely related to the immediate building program which provides for the construction of the central structure that has been described, are plans for the reconstruction of the power plant, a large extension to the nurses' home, additional quarters for the resident staff, laboratory expansion and other alterations and extensions, all of which will be carried forward by the Department of Hospitals as rapidly as circumstances permit.

# A Snapshot of Nurses' Training Schools at Work\*

By E. EVERETT CORTRIGHT

Junior College of Connecticut, Bridgeport

OF THE 2,180 hospital nursing schools in the United States, one-fourth are in the ten northeastern states comprising New England and the middle states. By official published records 52 per cent of these schools require one year of high school only for entrance; 30 per cent require two years; 2 per cent require three years, and 16 per cent have a four-year requirement.

Information on the topics discussed below was asked of 88 training schools distributed throughout the ten states requiring one year of high school, and of 76 training schools distributed over the ten states where two years of high school was the state requirement. From the sixty replies received, the study embraces 5,350 students in training and since the method of collecting the information was one of proportionate but random sampling of the total number of such training schools in each of the ten states, the findings can probably be accepted as being thoroughly representative of the practice. Each of the ten states is represented in the findings.

## How Many Are High School Graduates?

The study also includes certain factors regarding 2,525 graduates of the hospitals in question, or a total of 7,875 actual or prospective nurses. It may be interesting to know at this point that the average size class admitted to all these hospitals in 1929 is 33.6 students, and that the average size of the classes graduated in the same year is 16.4 students, making the apparent inference that only 50 per cent of the students accepted are graduated.

One of the three great questions involved in the training of nurses or of any other group of professional workers is the question of their preliminary education. My study made provision for distribution of the 1929 entering classes on the basis of the preliminary education that they possessed as being eighth grade, one year, two year, three year or four year high school, one year college or normal or two year college or

normal. The findings of the study disclosed that hospital training schools are admitting students whose preliminary education falls in each of the seven indicated groups.

The responses summarized indicate that 29 out of each 100 students accepted in these training schools during the past year had less preliminary education than that represented by four years of high school and that, therefore, they were ineligible to enter any normal school in these ten states. In Connecticut 36 per cent of the student nurses accepted in the training schools in the same year could not have secured entrance to any one of the state normal schools, having had less than four years of high school work. Apparently there is a small group, representing 3 per cent of the total admissions, whose preliminary education involved either one or two years of college or normal school, but the bright part of the picture is presented when the facts disclose that 68 per cent of the total number of students accepted in these schools presented four years of high school preliminary education, a standard not required by the states in which they were located.

I wonder, however, how any superintendent of nurses knows how to proceed upon a situation presented by some of the admissions. Hospital training schools No. 18 and No. 20 had the following distribution in the entering classes of 1929:

### Training School No. 18

Eighth grade .....	5
1 year high.....	8
2 year high.....	7
3 year high.....	2
4 year high.....	11
1 year college.....	7
2 year college.....	2

### Training School No. 20

Eighth grade .....	8
1 year high.....	3
2 year high.....	5
3 year high.....	4
4 year high.....	2
1 year college.....	1
2 year college.....	3

\*Excerpts from an address given before a meeting of the Connecticut State Nurses' Association.



These classes have no common background of education or experience that can possibly be utilized as a point of departure upon which to begin training, and of necessity the 13 students in this group of 68 whose education had been pursued beyond the high school should have had provisions made for completing the work in a shorter time than the others could hope to complete it. The reports on graduations with reference to acceptances in these two hospital training schools are miserably poor, showing that upon this basis of acceptance, in training school No. 18 graduations in the three-year period were 7 per cent of the acceptances, while in training school No. 20 graduations were 21 per cent of acceptances.

#### *An Expensive System*

This is a tremendously expensive system of education and represents not only blasted hopes on the part of entering students but a great waste of the cost of training since so large a proportion of the money spent is a temporary expenditure on students who never can qualify to practice the art of nursing. And the cost of all this waste practically came out of the pockets of sick people, those in each community who could least afford it.

But can directors of hospital training schools control or determine whom they take as students? I was much interested to know what influences were brought to bear upon superintendents of nurses in the acceptance of students who did not meet the regular requirements. Three possible channels suggest themselves: politics; friends or family; members of the board of directors. The replies indicate that in the main superintendents of nurses have no excuses for low standards insofar as outside influence to accept unprepared students is concerned. Less than 5 per cent of the entire replies indicated that any influence whatever had been exerted, and with the single exception of one naming politics and one implicating members of the board of directors, all of the influence, even in this small amount, was charged up to family and friends, and this can never be formidable. But it does not dismiss the pressure of the hospital itself that students be found for the school.

Regarding the length of term at which hospital training schools are operating, one training school has a course of 20 months, one of 28 months, 5 of 30 months, and all of the others are the standard 36 months of training. The last year is the profitable one for hospitals.

I also raised the question as to whether the instruction was given entirely by members of the hospital staff. The answers disclose a rather

balanced plan, with 56 per cent replying in the negative and 44 per cent in the affirmative. This indicates that hospital training schools are going outside their own staff and are engaging experts to give certain phases of instruction. Many of these phases are listed, but they fall chiefly in the realm of applied science and involve dietetics, psychiatry and other recent additions to the curriculum.

In the light of my supposition that student nurses were being accepted with almost no standard educational background, it was important to discover what the practice of the hospital training schools is with regard to carrying these students forward in the fields of general education—English, foreign language, history, mathematics, science—along with the technical nursing instruction. Possibly I had expected too much to be accomplished in a period of thirty-six months which, let us keep in mind, is the period that the college takes for its four years of work. Outside of an occasional class in English, only one training school reporting does anything in foreign language or in history (except the history of nursing which is technical), while three report that they find it necessary to drill in elementary arithmetic, and ten indicate general work in science in addition to the technical work involved. Apparently, then, we can dismiss as being practically if not wholly absent any practice to round out to any comparable level the widely varying qualifications presented, or to extend the general cultural background of the entire group.

#### *Who Pays the Cost?*

No matter what may be the fallacy behind the present practice in hospital training schools, nursing education costs somebody something; in fact, the responses indicate that it costs the sick people in the hospital a large amount of money. However, if there is one field in which superintendents of nurses have little or no knowledge of the facts in the situation, it is the field of finance.

The first question asked what investment had been made by the hospital in the matter of room and board for a nurse to be graduated. The replies vary so widely that one hesitates to draw a conclusion. The highest figure given is \$1,620 and the lowest \$233, while the average represents \$785 or \$21.80 a week for a period of thirty-six months. Practical experience indicates that this is an excessive estimation, but the truth is that we do not know the facts nor does anyone else know them.

I raised the question regarding investment in a student's clothing, and here again the answers, while they indicate definitely that it is not the

practice of hospital training schools to supply clothing for nurses, yet there are nine schools in which it is supplied, the highest of which estimates \$246 and the lowest \$9.50.

My third question in this field had to do with the amount of actual cash paid to the student nurse during her training. It is almost a universal practice to make such an allowance and the average allowance made is disclosed as being \$567, with the high figure standing at \$2,232 and the low figure at \$54. The most commonly mentioned figure is \$432.

#### *The Cost to the Hospital*

The last question under this heading asks for the total cost to the hospital per student for a 1929 graduate. Of course, no such figures exist in the hospital's files; at least I am confident that only two that replied were replying from factual material. The others gave estimations. Reduced to averages, the total cost to the hospital is estimated at \$1,377, with the high figure standing at \$3,244 and the low one at \$413, the commonly mentioned figure being a flat \$1,000.

The section on educational costs reflected more clearly than ever before that superintendents of nurses know almost nothing about costs or educational budgets because they have not been dealing with them. Reply after reply stated "We do not operate on a budget system. I cannot answer your questions," and comment given reflected that the lack of a budget system was one of the trying questions facing superintendents of nurses.

In this section the first question was, "What is your manual budget allowance for instruction?" Some of the large hospitals are forced to engage many of their instructors outside their own hospitals and therefore we find among the few who gave any figures that the high figure was \$12,000 and the low figure \$500. The most commonly mentioned fact was "We have no budget."

The second question in this section was, "What is your budget allowance for the library?" Every school realizes that its common reference workshop, the library, requires an annual upkeep, as does its laboratory. There were fewer budget allowances for library than for instruction, the high figure being \$500 and the low figure \$50.

The third question asked what the budget allowance was for laboratories because the science work in the laboratory is of tremendous importance in the training school course and it is simply impossible to administer a laboratory without an upkeep cost. Here again the query discloses that there is no budget allowance for this account except in a half dozen training schools, the high-

est figure being given at \$500 and the lowest at \$50.

The last question in this section asked what the budget allowance was for teaching aids and supplies. In any school system, one of the indexes of the quality of instruction is this item. The inquiry discloses, however, that except in four schools there is no budget allowance. Of these four, the high figure is \$2,000 and the low figure \$150. Running throughout the whole section is the ever recurring comment, "We have no budget."

Certain resources are immediately present in the mind when one speaks of a school and it seems only fair to expect that the schools conducted by hospitals shall possess certain fundamental equipment. The first question here asks for the number of classrooms used exclusively for instruction. The answers showed that the average number is 2.26, the highest reporting 8 and the lowest 1. There were, however, certain significant failures to report which leads one to question whether the minimum is really 1.

My next question was "How many volumes are in your library exclusive of reports?" Now of course every school has a library of some type, from the kindergarten on up. The average number of books in these training school libraries is reported as 224, with 500 being reported as the highest and 10 as the lowest. Training school No. 50 was the one reporting 500 and since it also reports that it admitted 190 students in 1929, its library is not overwhelming, with less than three books to a student. Training school No. 36 is the possessor of the 10 volumes and it reports admitting 10 students in 1929—a per capita possession of one, except for the fact that there were many other students ahead of those 10 whose training had not been completed.

#### *35% of Graduates in Institutional Work*

The third question was, "How many laboratories have you for your instruction work?" Every institution has a laboratory. When one considers that science is the strongest unit in the course, this is not to be wondered at. The average number of laboratories in these schools in the ten states is 2, the highest being reported at 4 and the lowest at 1.

So many complaints have been made against hospitals with regard to the extreme length of hours imposed upon the student nurses that I was anxious to disclose, if possible, when the educational classes came. While apparently many superintendents of nurses either were reluctant or refused to answer, of the replies that were made one can find little to criticize. My first ques-



tion asked how many classes were scheduled before 12 o'clock, and the answers disclose that 46 per cent of the classes are thus scheduled. The second question asked how many classes were scheduled between 12 and 5 o'clock, and the answers disclose that 48 per cent occur between those hours, that 4 per cent occur between 5 and 7 o'clock and 2 per cent between 7 and 9 o'clock in the evening.

But what do these graduates do? No matter how many fail while they are students or how meager may be the equipment, hospital training schools are graduating nurses and they find many avenues open to them. I was interested in disclosing, if I could, whether these nurses chose hospital or private nursing. The replies indicate that of all the graduates involved, 35 per cent are in institutional work, chiefly hospitals; that 55 out of every hundred so practicing are engaged in private duty; while 3 out of every hundred are engaged in industrial nursing, and 7 out of every hundred are in public health work.

#### *How May Conditions Be Improved?*

No questionnaire ever devised has completely covered the subject, for it deals with factual situations. Some opportunity should always be given for the expression of personal opinion that grows out of experience, and the last section of my inquiry asked the superintendents of nurses to indicate what they "would like to see happen" to increase the efficiency of nursing education and to produce better conditions for nursing practice.

Not all accepted the invitation. Of the answers received, I have selected 40 as being most pertinent. Many of the suggestions given were listed by several:

1. Extend the preliminary course from four to six months.
2. An appreciation on the part of the general public of the fact that education is essential for a foundation for nursing.
3. Make standards for admission four years of high school.
4. Loan fund for postgraduate education.
5. Schools of nursing established independent of hospitals.
6. Nursing education placed on the same basis as that for other professions.
7. Nursing education subsidized by public funds or endowed.
8. Development of a registry that provides hourly or group nursing.
9. Eliminating the necessity for hospitals depending upon students for its nursing service.
10. Time on duty, including theory, not to exceed forty-four hours a week.
11. A separate board of education or organization through which the school could operate without being subservient to the nursing needs of the hospital.
12. The educational work should function independent of hospital nursing needs.
13. Separate endowment for the training schools so that it need not always be handicapped by the financial difficulties of the hospital.
14. Realization on the part of the medical profession and the public that nurses are human beings and entitled to fair working conditions.
15. The right of nurses to solve their own problems and manage their own affairs. There is too much help from persons not qualified to give an opinion.
16. A nursing curriculum among the others in our high schools, following the recommendations of the National League of Nursing Education.
17. A high school course that would include biology, chemistry, physiology, anatomy, hygiene and sanitation.
18. Raise entrance requirements to twenty-one years of age.
19. Official registrars provided by state law.
20. Better living conditions for the students while in their training would attract a better type of girl to the school.
21. Educating boards of trustees to the waste of money that occurs in eliminating the large number of unfit students.
22. Take the teaching of science out of the hands of interns.
23. A prenursing course in high schools with emphasis upon literature, history, language and sciences.
24. A larger provision for recreation, both during training and after graduation.
25. The present curriculum is heavy in theory for those who wish to take up private duty and it robs them of time for practical experience.
26. Refuse to accept student nurses who have taken the commercial course in the high school.
27. Uniform requirements for graduation and registration.
28. A standard that would prevent more nurses from being graduated every year than the public needs.
29. Affiliation with other hospitals and schools would be of great advantage.
30. A training school committee appointed from the board of directors to present the claims for better students to the community as a whole.
31. No school be permitted to accept students under twenty-two years of age.
32. Reeducation of registered nurses and su-



pervisors or compulsory attendance at modern nursing demonstrations.

33. Standardized preprofessional education for all schools of nursing.

34. Standardized entrance requirements for all schools of nursing.

35. More time for cultural education and extra-curricular activities during the training course.

36. Entrance requirements affiliated in terms of content as well as time required—at least two years of foreign language, two years of science and four years of English.

37. Central nursing schools.

38. See that psychology is placed in the preparatory course.

39. Deplorable how many girls of eighteen to twenty-five years of age know nothing of dietetics.

40. Requiring graduate work in higher education among all our instructors. Students should receive full credit in dollars and cents for the work they perform in the actual care of patients, for the first year forty cents an hour, the second year fifty cents an hour and the third year sixty cents an hour.

#### *Diverse Opinions on the Raising of Standards*

In addition to securing information from the superintendents of hospital training schools, I wrote the commissioners of health in the ten northeastern states; the secretary of the registration board for nursing in forty-four states and the commissioners of education in a few selected states having strong state educational systems. Outside of questions of fact that had to do with the number of registered nurses in such states and the work of the board of examiners, I attempted to get the reaction of all these people on a concerted program that called for raising the legal requirements in the various states for entrance to the hospital training schools, making a two-year high school requirement effective in 1931, a three-year requirement in 1933 and a four-year requirement in 1935.

Many curious things appeared in the replies, the summarized opinion of which runs something like this:

1. Commissioners of education see clearly the necessity for placing nursing on the same professional basis as teaching and see no reason why such a program is not entirely feasible.

2. Some commissioners of health see every possible reason why this should not be done.

3. Secretaries of registration boards for nurses, with one exception, agree that the move should be made if it can be made through the

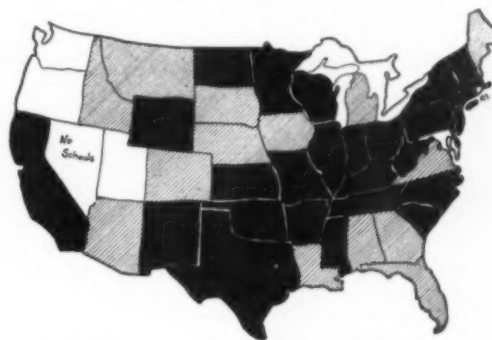
legislature, without jeopardizing gains already in hand.

In considering such a program, it is necessary to present the facts as they are and I am therefore asking you to scan the map reprinted from the *American Journal of Nursing* for February, 1929. Certain changes, however, have taken place since this map was printed, all looking toward raising the educational requirements. Minnesota has left the eighth grade group now occupied by Mississippi only, and requires one year of high school; Colorado now requires four years of high school, with the change effective Septem-

#### State Registration Requirements for Entrance to Nursing Schools

SOURCES: Digest of the Laws of the States and Territories compiled by Wisconsin Legislative Reference Library, and issued by American Nurses' Association, New York, 1928. List of Schools of Nursing Accredited by State Boards, published by American Nurses' Association, January 1, 1928.

4 years High School	X Arizona	1 year High School	Montana	New Mexico
Maryland	X District of Columbia	Arkansas	Nebraska	X New York
Oregon	Florida	California	North Dakota	X North Carolina
Rhode Island	Georgia	Connecticut	Ohio	X North Dakota
X Utah	X Idaho	Illinois	X Ohio	X Oklahoma
Washington	X Iowa	Indiana	X Pennsylvania	X Pennsylvania
2 years High School	X Louisiana	Kansas	South Carolina	Tennessee
Alabama	X Maine	Kentucky	Texas	X Vermont
	X Michigan	X Massachusetts	West Virginia	X Wisconsin
		X Missouri	X Wyoming	
		X New Hampshire		
		X New Jersey		



States requiring one year or less of high school education: ; two years: ; three years: ; four years: ; for entrance to nursing school

Replies received from those checked with "x".  
Changes since map was printed

1. Colorado	4 years H.S.	effective Sept. 1929
2. Minnesota	1 year H.S.	
3. New York	4 years H.S.	effective July 1, 1932
4. Idaho	4 years H.S.	effective July 1, 1931

ber, 1929; Idaho will require four years of high school on July 1, 1931, and New York State will also require the same on July 1, 1932.

The movement then for raising preliminary educational requirements is well under way, but outside of New York State no program is set up in any of the other ten northeastern states, if one keeps in mind the fact that Maine is the only one of such states that already has a two-year requirement. I recommend the initiation of a program of concerted action in all of the ten northeastern states, with the exception of New York, that shall result in a four-year high school preliminary education requirement at a date not

earlier than 1932 or later than 1935. The following suggestions, which might offer the basis for planning such a program, are quoted from an address made by me before a meeting of the Graduate Nurses' Association of Connecticut.

"If you are satisfied to leave the educational practice as disclosed by the cross section presented, no responsibility for action comes to this group. If, however, you subscribe to the two principles of the Committee on the Grading of Nursing School as stated in 'Nurses, Patients and Pocketbooks,' page 447, definite responsibility on your part and resultant action would appear to be inescapable. Let me remind you that reforms do not come through miracles; somebody must lead. A clearly conceived program and the crusading spirit alone supply the conditions for progressive change within the nursing profession.

#### *The Diagnosis and the Treatment*

"It may be helpful to face a series of suggestions which together forms more or less a definite program, especially if these suggestions come from someone outside of your profession. As one interested in proper educational administration, I believe that the diagnosis of the present situation calls for the following treatment:

"1. Take the necessary measures to produce an intelligent public opinion on the facts in training schools as they are run to-day. Other professions have long since taken the public into their confidence. It is futile to expect that this discussion and others like it will have any effect upon the situation unless it overflows the banks of your professional stream and engulfs the general public.

"Adopt a program for sending a battery of speakers to the civic clubs in the state and to the women's organizations for at least a year. The spoken word is ten times as valuable as the written word.

"Prepare a series of carefully written articles for publication in a widely read school publication and secure a thousand reprints for use in strategic places.

"Secure the effective placement of a two-page article in magazines of national circulation.

"Reach the guidance directors in our senior high schools asking them to give nursing a square deal.

"Secure the names of all members of boards of directors of hospitals and reach them with a series of four-page leaflets, probably in question and answer form, on striking facts in the training school practice.

"2. Work toward the abandonment of the pure apprenticeship system as being any longer

necessary or adequate for training schools. Every professional worker requires some knowledge of the art side of his profession, but never can this safely be the whole of his preparation. Even on the purely vocational side, the present plan of education within the training schools violates modern practice.

"'Apart from schools designed to extend or supplement apprenticeship, of which European countries furnish the principal examples, the only type of modern vocational education which has not suffered a long enslavement to academic tradition, is that developed since 1850 for the training of nurses. Here conditions rather than any clearly conceived purpose impose reasonably sound pedagogic standards from the outset; in fact, programs lean so far to the practical as to require, like apprenticeship does, social safeguarding to save the learner from exploitation.'<sup>1</sup>

"If training has been confined entirely to detail—to the art side of nursing, which is the how instead of the why of nursing procedure—your mind can only be attuned to receive thoughts and ideas in terms of detail and technique.

"3. Take whatever measures are necessary to secure an adequate supply of suitably prepared applicants so that no school must take all who apply. The criterion must be for the profession itself and not the needs of the hospital. In this connection the public must be brought to a clear recognition that the new openings for public service for women—teaching, library, social and welfare work and business—each with a carefully defined program of rising standards of eligibility and training are a distinct liability to the nursing profession unless it too can take similar action.

#### *At Least One Central School of Nursing*

"The gap between the requirement of preliminary education, now standing at one year in twenty-six states, and the age requirement of eighteen must be closed. These conflicting requirements invite girls to leave school at the end of the first year of high school, either to work in factories or elsewhere until they are eighteen and then to apply for admission to the training school. Your regulations should stand in exactly the opposite relation, with the educational requirement high and the age low, if you are anxious to get a supply of bright young women.

"4. Lay your plans for a program that will demand a sound and honest system of accounting on the part of the hospital so that the facts re-

<sup>1</sup>Snedden, David, Sociological Determination of Objectives in Education.



garding the training school may be available to everyone. An item in this accounting must clearly admit that training school students are paying tuition in the form of the expense saved the institution. Am I too bold when I suggest that it is probably true that they are paying a higher tuition than that of our college students? In this system of accounting, hospitals must have a training school budget with definite allowance for instruction, library, laboratories, teaching aids and supplies around which the superintendent of nurses must be left free to build her educational organization.

"5. The initiation of a campaign of inquiry, organization and solicitation that shall provide for at least one central school of nursing independent of all hospitals, but affiliated with many. These schools must wrestle with the questions of admission and eligibility and upon them hospitals may call as special needs arise. In them students shall pay tuition. To them hospitals shall go for candidates to enter the vocational aspect of their training. On their board of directors, superintendents of hospital training schools shall have a place.

#### *Financing the Central School*

"The funds? Such a school must be endowed or have financial backing over a period of ten years. Better general health and better nursing are of immeasurable value to insurance companies and to industry. During 1929 wage earners lost 250,000,000 days through illness and school children lost 7,000,000 days attendance for the same reason. Both the insurance companies and industry will respond, if properly approached, to the establishment of a central training school in some city where the demands will make it worthwhile.

"6. Cooperate unreservedly with the Committee on Grading. It is the brightest spot in the whole nursing horizon. The American Medical Association has shown that the establishment of grade A schools and grade B schools turns the tide of the brightest students definitely to the former and acts as a continual urge upon the administration in the latter to find the ways and means of qualifying to become grade A schools.

"Organize over a period of time a carefully considered and well advised program of social and legislative action that will remedy the wholly inadequate educational resources in buildings, staff and equipment of the hospital training schools and remove the legitimate points of attack now being directed against these schools and which, if continued, can have no other effect than becoming an ever enlarging handicap."

## A Survey of the Hospital and Health Services of Philadelphia

A survey of the hospital and health services of Philadelphia has recently been published under the directorship of Dr. Haven Emerson who organized and promoted the survey.

"The Philadelphia Hospital and Health Survey" is a record, prepared for public distribution, of a study of organized care of sickness and of official and volunteer health activities in Philadelphia and its environs. The 844 pages of the book are divided into two main sections. The first is devoted to public health services, with recommendations for improving the health services of the city. Special studies are presented of social hygiene, tuberculosis, maternity and child hygiene, crippled children, conservation of vision, public health nursing, cancer, heart disease, mental hygiene, industrial hygiene and mouth hygiene.

The second part of the survey is devoted to a study of the organized care of the sick. Chapter headings include: Hospitals; Hospital Out-Patient Departments and Unattached Dispensaries; Social Service in Hospitals and Dispensaries; Convalescent Care; Care of the Chronic Sick.

Many organizations collaborated in making the survey a complete one. Chief among them were: the American Social Hygiene Association; the American Child Health Association; the American Society for the Control of Cancer; the National Committee for the Prevention of Blindness; the Committee on Mental Hygiene of the Pennsylvania Charities Association; the Philadelphia Health Council and Tuberculosis Committee; the Philadelphia Heart Association; the Philadelphia Mouth Hygiene Association; the Philadelphia Child Health Society; the Philadelphia Visiting Nurse Society; the Committee on the Cost of Medical Care; the Philadelphia Welfare Federation; the Hospital Association of Philadelphia; the American Association of Hospital Social Workers, District Branch; the Family Society of Philadelphia; the Armstrong Association of Philadelphia; the Federation of Jewish Charities; the Protestant Episcopal City Mission; the Philadelphia County Medical Society and other health and welfare organizations.

## A Plea for More Readable Hospital Reports

A plea for less complicated and more readable hospital reports is contained in an article in *The Hospital* on the subject, "Statistics—Are They Our Servants or Our Masters?"

"It is a common failing of statisticians," the article says, "that they do not know where to stop. . . . It is easy to analyze and reanalyze, and divide and subdivide; but it is not easy to make people read the results of such analysis and division.

"Every experienced hospital officer knows what are the salient points to which he looks when examining the accounts either of his own or of any other hospital. He wants to see concisely: the name of the hospital; the number of occupied beds; the income; the expenditure; the surplus or deficit; the cost per occupied bed; the cost per in-patient per week; the number of out-patients; the cost per out-patient and the cost per out-patient attendance."



# What Charges Shall the Physical Therapy Department Make?\*

By WILLIAM BIERMAN, M.D.

Director, Department of Physical Therapy, Sydenham Hospital, New York City

THE charge to be made for treatment given in the physical therapy departments of hospitals and clinics is a puzzling matter to the administrators of many such institutions.

Obviously, because of the greater overhead incurred in the administration of such treatments, the usual clinic fees charged for them are insufficient. This increased overhead expense includes the cost of such necessities as specially trained technicians, expensive equipment which requires adjustments, replacements and new additions and large quarters. To give effective treatment it is essential that a sufficient amount of time be given each patient. This time interval will depend, of course, upon the modality or modalities applied. As a rule, it is never less than a half hour and may extend over a period of two hours or even longer.

## Deciding on an Equable Fee

Departments of physical therapy are comparatively new in hospitals and clinics. In fact, they are so new that no definitely established schedule of fees has as yet been determined. To reach a conclusion as to what would constitute an equable fee, the institution must first determine whether or not it wishes its department of physical therapy to be placed on a self-supporting basis.

If the institution is an affluent one, desirous of rendering charity without any special regard to the patient's ability to pay even a small sum or without regard to the costs involved, the mat-

ter of a charge is of no special interest. Such charges to out-patients might be the usual ten, fifteen or twenty-five cent fee. Most charitable institutions, however, are in no such strong financial position. It is probable that most charity patients are able to pay a fee slightly larger than those customarily made in out-patient departments. It must be recognized that patients taking physical therapy treatments usually come not for one treatment, but for a series of treatments.

## Should Ward Patients Pay?

With reference to the patients within the hospital, the special problem is whether or not ward patients should be charged for physical therapy treatments. These individuals are presumably completely indigent, their stay in the hospital precluding the possibility of their earning anything at all. Their outside expenses go on and there is usually some small financial obligation they must meet while in the institution. If it is decided that these individuals shall pay something, no matter how small, it must be left to the discretion of the social service department as to whether in a given instance even such a small fee shall be waived.

Patients in semiprivate or private rooms can presumably afford to pay some fee for physical therapy treatments.

Another problem that presents itself is this: Shall a flat charge be made for each visit or shall the charge be dependent upon the amount of time consumed in giving the treatment? Obviously the larger the number of modalities applied

\*Paper read before the New York Electrotherapeutic Society.

TABLE I—WHAT PRIVATE PATIENTS PAY FOR PHYSICAL THERAPY IN EIGHTEEN HOSPITALS\*

	\$5	\$3	\$2	\$1	\$2-\$5	\$3-\$5	\$2-\$4	\$2-\$3	\$0.50	\$0.00
Diathermy .....	3	4	..	..	2	2	..	..	2	2
Ultraviolet .....	3	3	1	..	1	2	..	1	2	2
Radiant light and heat .....	3	3	1	..	1	1	1	1	2	2
Galvanism, etc. ....	3	3	..	..	1	4	..	..	2	2
Static .....	2	1	1	..	1	2	..	..	2	2
Massage .....	4	2	2	..	1	2	..	1	2	2
Corr. Ex. ....	4	2	1	1	..	2	..	1	2	2
Hydrotherapy .....	2	2	2	..	..	2	..	1	2	2
Mechanotherapy .....	3	2	1	1	..	2	..	1	2	2

\*Two institutions of the eighteen do not have physical therapy service.

TABLE II—THE COST OF PHYSICAL THERAPY TO SEMIPRIVATE PATIENTS IN EIGHTEEN HOSPITALS\*

	\$4	\$3	\$2	\$1	\$2-\$5	\$3-\$5	\$2-\$4	\$2-\$3	\$3.50	\$0.50	\$0.00
Diathermy .....	4	2	.	2	1	.	1	1	2	2	
Ultraviolet .....	3	3	.	1	1	.	2	1	2	2	
Radiant light and heat .....	3	3	.	1	.	1	2	1	2	2	
Galvanism, etc. ....	5	1	.	1	2	.	1	1	2	2	
Static .....	3	2	.	1	1	.	1	1	2	2	
Massage .....	1	3	1	2	1	1	2	1	2	2	
Corr. Ex. ....	4	2	1	.	1	.	2	1	2	2	
Hydrotherapy .....	3	3	.	.	1	.	2	1	2	2	
Mechanotherapy .....	3	2	1	.	1	.	2	1	2	2	

\*Three institutions have no service.

and the longer the duration of the treatment, the greater the cost to the institution.

In the effort to determine what fees are being charged at present, a questionnaire was sent to twenty-two representative institutions. Of these, eighteen replied. This would signify an active interest in the growing demand for physical therapy in hospitals.

In summarizing the returns, we have felt the figures relating to diathermy, which is likely the

as for sinusoidal or massage treatments or for a combination of them. In one or two cases corrective exercises and massage were listed with a higher fee than diathermy, but in the remainder diathermy charges were consistently higher.

Those hospitals giving treatments to private patients without any specific charge made allowances for such extras in their daily blanket charge.

Treatments without charge to out-patients were given when the social service department deemed it necessary. In many of these instances the dispensary paid a small fee to the department of physical therapy.

In those instances of a range of prices, the ability of patients to pay and the amount of time required to give the treatment were taken into consideration.

In only one hospital out of the eighteen was there no physical therapy service in either the out-patient department or in the hospital.

From a review of the data presented it will be noted that, with reference to private patients, twelve out of fourteen institutions charge from \$2 to \$5 for a treatment. These patients are presumably able to pay the usual medical fees; therefore, the fees charged them should be comparable to those charged outside of the hospital for similar services. For semiprivate patients, the

TABLE III—PHYSICAL THERAPY RATES FOR WARD PATIENTS IN EIGHTEEN HOSPITALS\*

	\$2	\$1	\$1.50	\$2.50	\$0.00
Diathermy .....	2	5	1	1	2
Ultraviolet .....	2	5	1	1	2
Radiant light and heat .....	2	5	1	1	2
Galvanism, etc. ....	2	5	1	1	2
Static .....	2	5	1	1	2
Massage .....	2	6	1	1	2
Corr. Ex. ....	2	4	1	1	3
Hydrotherapy .....	2	5	1	1	2
Mechanotherapy .....	2	4	1	1	2

\*Five institutions have no service.

most widely used modality, would be sufficient to give us some knowledge of the charges made. In two-thirds of the cases no distinction was made between the charges for any of the modalities, the patients paying the same fee for diathermy

TABLE IV—WHAT OUT-PATIENTS PAY FOR PHYSICAL THERAPY TREATMENTS IN EIGHTEEN HOSPITALS\*

	\$2-\$5	\$2-\$4	\$2	\$1	\$0.50	\$0.25	\$0.35	\$0.00-\$1
Diathermy .....	1	.	2	5	3	.	2	3
Ultraviolet .....	1	.	2	5	3	.	2	3
Radiant light and heat .....	.	1	2	5	3	.	2	3
Galvanism, etc. ....	.	1	2	5	3	.	2	3
Static .....	.	1	2	5	3	.	2	3
Massage .....	.	1	2	5	3	.	2	3
Corr. Ex. ....	.	1	2	4	3	1	2	3
Hydrotherapy .....	.	1	2	5	3	.	2	3
Mechanotherapy .....	.	1	2	4	3	1	2	3

\*Two institutions have no service.

charges made by the majority of institutions range from \$2 to \$3 a treatment.

The greater number of institutions charge \$1 a treatment for ward patients. If the social service department finds that this charge is too much of a burden, it may recommend its removal. When it comes to the care of out-patients, the majority of institutions seem to favor a charge of \$1 a treatment.

It is recognized that this survey of charges made in physical therapy departments of hospitals covers too small a number of institutions to permit definite conclusions to be drawn as to average charges made. Every hospital faces problems peculiar to itself that will influence it in determining the charges to be made in its department of physical therapy. The data presented here are submitted with the hope that they may serve as a nucleus for discussion as to what shall be considered an equitable charge to be made for physical therapy treatments.

The accompanying tables summarize the answers to the questionnaire.

### New York City Hospitals Receive \$16,575,600 During 1929

Out of a total of \$27,199,221 bequeathed during 1929 in New York City for hospital, social welfare, educational and religious purposes \$5,960,600 was left to hospitals, according to a recent announcement by the United Hospital Fund.

The amount bequeathed to hospitals exceeded last year by \$1,536,531. The largest hospital bequests during the year were \$1,000,000 to Roosevelt Hospital by L. W. Seaman, and \$1,000,000 to the Home for Incurables by Ogden Mills. These sums are applied generally to new buildings and capital accounts of the hospitals and not to current operating expenses. Most of the hospitals incur heavy operating deficits because of their free service.

According to *Better Times*, welfare magazine, which, with the Fund, compiled the record during the year, hospitals were mentioned in wills in a larger number of instances than any other altruistic agency. No less than 206 wills contained outright bequests for hospitals or named them as residuary legatees, in many cases a given hospital being mentioned in more than one will. The total number of hospitals, including the United Hospital Fund, named as beneficiaries was 132.

The total bequests for all altruistic purposes amounted to \$27,199,221, almost twice the total for last year, which was \$14,316,647. Of the total for 1929, bequests for educational purposes led any other group of organizations with a total of \$7,358,500. This classification included colleges, schools, libraries, museums and medical societies. The second largest total of bequests were of those made for general charitable purposes, exclusive of hospitals, and aggregated a total of \$6,439,637.

In addition to approximately \$27,000,000 in bequests for altruistic purposes, gifts by citizens of New York City and by the General Education Board reached the tremen-

dous total of \$64,914,500. Of this sum hospitals received \$10,615,000. Thus the total of bequests and gifts to hospitals during the year was \$16,575,600. Among the largest gifts to hospitals was one by John D. Rockefeller, Jr., J. P. Morgan and George F. Baker to further the merger of the Lying-in Hospital with the New York Hospital-Cornell Medical Center, and an additional \$2,000,000 in buildings by Mr. Morgan to the New York Hospital. These hospitals are members of the United Hospital Fund.

During 1929, according to the statement, thirty-four of the institutions affiliated with the United Hospital Fund were mentioned in wills. They included: Babies' Hospital, Beth Israel Hospital, Bronx Hospital, French Benevolent Society of New York, Fifth Avenue Hospital, Herman Knapp Memorial Hospital, Home for Incurables, Hospital for Joint Diseases, House of the Holy Comforter, Italian Benevolent Institute and Hospital, Jewish Memorial Hospital, Knickerbocker Hospital, Lebanon Hospital, Lenox Hill Hospital, Long Island College, Lutheran Hospital of Manhattan, Manhattan Eye, Ear and Throat Hospital, Methodist Episcopal Hospital, Montefiore Hospital, Mt. Sinai Hospital, New York Homeopathic Hospital, New York Orthopedic Dispensary and Hospital, New York Post-Graduate Medical School and Hospital, New York Skin and Cancer Hospital, New York Society for the Relief of the Ruptured and Crippled, Presbyterian Hospital, Prospect Heights Hospital, Reconstruction Hospital, Roosevelt Hospital, St. John's Hospital, St. Luke's Hospital, St. Marks Hospital, Sydenham Post-Graduate Hospital and Wyckoff Heights Hospital.

The three hospitals most frequently mentioned were Mt. Sinai, which was named twenty-one times, Beth Israel, which was named twenty times, and Montefiore, which was named eighteen times. These three enjoyed the same distinction in 1928 although Montefiore then ranked first and Mt. Sinai third.

### Who Is to Blame When Ill Results Follow Hypodermic Injections?

When ill results follow a hypodermic injection, then the conditions and circumstances under which the injection was given must be taken into consideration, a court decided recently when a wife and her husband sued to obtain damages for alleged malpractice on the part of a physician who permitted a hospital nurse to give the wife an injection of ergot following which an abscess developed. The case is reviewed in the *Journal of the American Medical Association*.

"If, said the court, the patient had been delivered in a private home where no antecedent preparations had been made, then unquestionably a physician would be negligent in allowing a hypodermic injection to be given without proper precautions. But the delivery took place in a well appointed hospital where emergencies were anticipated and prepared for in advance, where instruments were sterilized and kept for emergency uses and where the physician was surrounded by trained assistants. The physician knew of these conditions and the evidence did not show that he was negligent in relying on them. The fact that he permitted the injection to be given by a nurse would not of itself give rise to an inference of negligence. The act of administering the drug was mechanical, a part of the routine work of the nurse, and it was shown that nurses in the hospital had been carefully and fully instructed in the mechanics of the art. The decision, therefore, was in favor of the defendants."



# Developing Efficient Food Service in the Sanatorium



By G. L. BELLIS, M.D.

Superintendent, Muirdale Sanatorium, Wauwatosa, Wis.

**F**OOD is fundamental to life. Where food is plentiful, of sufficient variety and of good quality, life flourishes and happiness reigns. Where food is restricted in quantity, lacking in variety and of poor quality, sickness and misery find an open door. It has been generally observed that the morbidity and mortality rate of tuberculosis in any given country is in inverse ratio to its food supply. In this fact we are ably supported in our belief that the better our state of nutrition, the better are our offense and defense against tuberculosis.

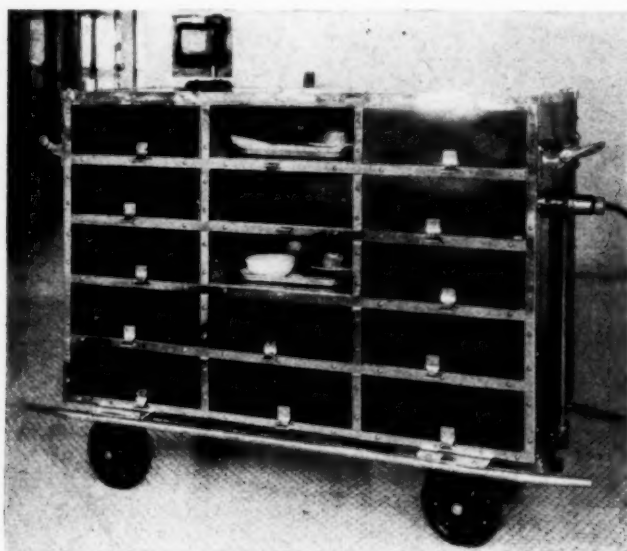
Rest, fresh air and proper food, upon which rests the foundation of successful sanatorium treatment, have to do almost entirely with the conservation and promotion of body nutrition. Proper food becomes at once a subject of at least equal importance with the other two in the administration of any institution purporting to treat persons suffering from tuberculosis. Unfortunately, the food requirements of our patients present a far more complex problem for the sana-

torium administrator than do the factors of rest and fresh air. A good bed and reclining chair, plus the cooperation of the patient, go a long way toward securing rest while fresh air flies in through the open window.

This is not the case with food. Here is a factor beset with all the trials and tribulations to which the human flesh is heir, and it is doubtful if the time will ever come when the food problem for the tuberculous sick will have been solved to the entire satisfaction of all concerned. This rather hopeless prediction is based upon many more or less incompatible and perplexing situations. The patient population of our sanatoriums comprises various racial groups, with all of their diversified food habits and customs. Capricious appetites and whimsical ideas as to food are peculiar to tuberculosis as well as to many other forms of illness, and mistaken conceptions are only too often fostered by sympathetic relatives and friends.

Then, too, there is the situation within the san-

atorium. Not every architect who plans sanatorium and hospital buildings gives adequate consideration to the food service department. Plans for cooking and serving as a result are too often inadequate or are poorly arranged, thus making it almost impossible to develop an acceptable service. Proper equipment is often lacking, and the salary budget for cooks and helpers is often too meager to attract competent personnel. We cannot always escape the tendency on the part of unconscientious merchants to unload upon our public institutions inferior food products. Also I am not quite sure that the subject of per capita cost does not have some remote bearing on the administration of food service in our institutions. To develop and maintain the food service for the sick to the greatest possible degree of efficiency



*The tray conveyor has fourteen compartments.*

in the sanatorium becomes, therefore, an urgent and continuous duty of every sanatorium administrator.

As conditions having to do with markets, deliveries and storage differ in major or minor respects in the varying localities where sanatoriums are in operation, no fixed policy can be applied in all instances. Certain principles of procedure, however, may be applied in food administration that may work to the advantage of all concerned. A brief description of the application of such principles at Muirdale Sanatorium, the Milwaukee County institution for the tuberculous at Wauwatosa, Wis., will perhaps serve best the purpose of explanation.

First, all foods used in the sanatorium are classified into two main groups—staples and perishables. Staples consist of such products as breakfast foods, canned goods, crackers and cookies, dried fruits and vegetables, flour, sugar,

coffee and tea. Foods that require refrigeration, such as fresh fruits, vegetables, meats, milk, cream and butter, fall into the perishable group. To ensure a fresh raw product at all times, deliveries of staples are made monthly in quantities to last for a period of thirty days while perishables are delivered daily or weekly, depending upon the degree of their perishability and upon the sanatorium's facilities for proper storage. All deliveries are carefully checked as to quantity and quality, and discrepancies or other unsatisfactory conditions are reported at once to the business office or to the dietitian, as the case may be. When practical, all staples are purchased on the basis of quality and price following the submitting of samples for comparison, and competitive bids. This method gives plenty of opportunity for a careful food selection and for economic buying. Fresh fruits and vegetables are purchased only in season and in quantities that may be immediately consumed.

#### *Quality Should Come First*

Quality should take precedence over all other considerations in the purchase of food for the tuberculous sick. Since food is of basic therapeutic importance, when it is of an inferior quality it defeats its own purpose. Because of the infectious nature of tuberculosis, plus the necessity of serving a liberal ration, the margin of waste food is large even under the best of conditions. How much greater, therefore, is the waste and how much less the food intake of patients whose finicky appetites have been wrecked by tainted butter, storage eggs, blue milk, strong meat, stale fish or any one of a number of other inferior food products that find their way into otherwise very decent sanatoriums. The garbage pail tells the tale, ably seconded by patients and employees. The point to be emphasized, however, is the fact that first quality foods are the most productive of therapeutic results, happiness and contentment, freedom from distressing situations and actual economy in the care and treatment of the individual patient.

The delivery of the best of food products to the door of the sanatorium does not always ensure the delivery of the best of prepared foods in the best possible condition to the patient's table or bedside. Good foods may be completely ruined by incompetent, careless or indifferent cooks. When such is the case no charity should be extended. Given good raw food products, the most common cause for faulty foods in both hospitals and sanatoriums can, in the main, be limited to delays in serving and the consequent loss of original heat and flavor. Cooks should "time"

cooking to reduce delays to the minimum. The more rapid the serving, the better the food.

The experience of Muirdale Sanatorium in providing a more efficient food service for tray patients has not only been interesting but also exceedingly valuable from an administrative and economic standpoint.

Muirdale, a hospital and sanatorium for the treatment of tuberculosis, one of a group of seven institutions operated by Milwaukee County, was opened for the admission of patients November 15, 1915. The system of tray food service for patients incorporated in the plans of construction consisted of a central kitchen and three serving kitchens, one on each floor of the hospital building. Foods prepared in the main kitchen were transported in special bulk food carts through a basement corridor to a service elevator and thence to the several floors. The food was then taken from the carts and placed in steam tables to be rationed on trays and distributed. Diet kitchen gas ranges were used for the cooking of specials, each kitchen being fully equipped with cooking utensils, china and silverware, and having also a cupboard and a refrigerator for foods of varying description. The operation of three serving kitchens required a complement of twelve maids under the supervision of a dietitian.

Twelve years of experience in the operation of this system of hospital food service brought to the attention of the administration the following unsatisfactory features:

1. A decrease in the palatability of hot foods because of the lapse in time between preparation and serving.

2. The excessive handling of the food and its exposure to contamination are sources of danger.

3. Difficulties in determining the exact quantities to be brought from the main kitchen.

4. The pilfering of food and other supplies.

5. The difficulty of placing responsibility because of the impossibility of one dietitian's supervising the work of three separately placed diet kitchens, especially at the time when skilled supervision was most needed.

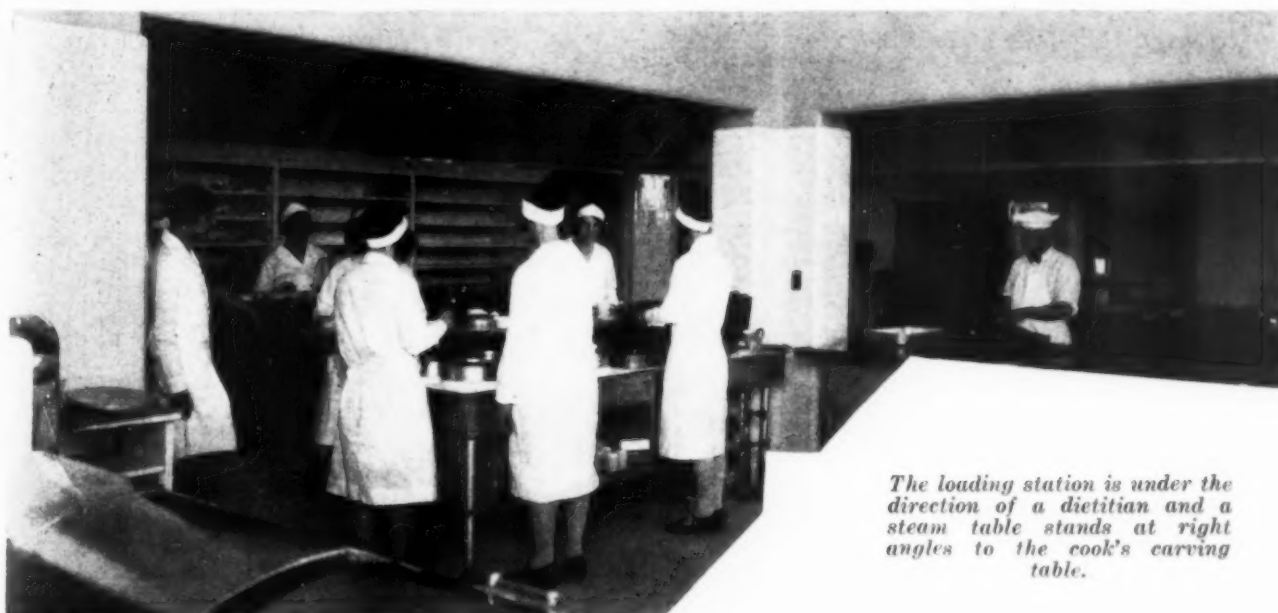
6. The disturbing effect on the sick of noises, necessary and unnecessary, from the serving kitchens on the hospital floors.

7. The excessive breakage of china and glassware and the consequent food loss.

Since most of the complaints from patients were traced to the loss of heat and to the resulting loss of flavor of the food, an ingenious tray conveyor was devised and constructed to overcome this objection. The tray conveyor consisted of an electrically heated, insulated metal cart with a built-in hot water pipe circulating system, and having fourteen separate compartments for trays. When the conveyors were put into use in the serving kitchens, complaints about cold food ceased at once.

The successful use of the special tray conveyor cart from the serving kitchens suggested the practicability of a centralized tray service from the main kitchen. A survey was accordingly made as to the feasibility of adopting the new idea. It was found that with a limited amount of alteration and the resetting of equipment it would be entirely practicable to establish a complete central serving room unit in close proximity to the kitchen ranges. Plans were drawn, contracts let and the changes made.

The tray conveyor carts are now stationed along the rear wall of the kitchen where electric



*The loading station is under the direction of a dietitian and a steam table stands at right angles to the cook's carving table.*



current is supplied through wall outlets for heating the water in the carts to the desired temperature (140° to 180°, the range of thermostatic control). The trays previously set up occupy the compartments, all specials being indicated by name of patient and room number, plainly written on a card and inserted in its respective compartment door clip. The heating of the cart is timed to ensure the maximum desired temperature at the exact time for beginning the tray service.

#### *Doing Away With Lost Motion*

The loading station is arranged to reduce lost motion to a minimum. A steam table stands at right angles to the cooks' carving table which in turn is immediately in front of a battery of electric ranges and ovens. Directly opposite the steam table, allowing sufficient space for the stationing of the carts, is the cold food pantry divided into sections and containing individual portions of all cold foods ready for serving. In the meantime hot foods, general and special, have been cooked and so timed as to be placed in the steam table within as short a time as possible before the zero hour for tray serving arrives.

The clock strikes the hour and the servers take their places, the dietitian occupying a place of special vantage for supervision. Two carts are disconnected and brought to the station. The first one is empty and the second is filled with set-up trays. The specials are usually served first. One attendant opens the compartment doors, a second attendant places the trays on the cafeteria tray slide and the service is on. The dietitian calls for the food to be served on each special tray (one server for each hot food) and the tray, when it is completed, is placed in that compartment of Cart 1, showing the name and room of that particular patient. In the meantime the cold foods for each tray to be served from that cart are being placed on the top of the cart by the cold food pantry attendant. As soon as the loading is complete the cart is on its way to the elevator to be taken to the desired floor where the trays are distributed. Cart 2, being empty, now advances and Cart 3, which is filled, takes the place formerly occupied by Cart 2. With a well organized group of servers, the service is exceedingly rapid (150 trays in from thirty to thirty-five minutes) and the food reaches the patient almost direct from the kitchen range without any loss of its original heat and flavor.

With a sufficient number of carts to take care of the entire tray service, double trips are not required and the conveyor remains on the floor to collect the trays of soiled dishes and return

them to the dishwashing room. Following the washing and sterilization of trays, china, glass and silverware, and the cleaning of the carts, trays are again set up, placed in their compartments and the conveyor returned to the cart station ready for the next call to active service.

The operation of the new system has resulted in the following advantages:

1. It has eliminated the major portion of the work of separate diet and serving kitchens and has made available additional floor space for patients' beds.

2. It has eliminated the necessity for the multiple handling of food, and it has reduced waste and lessened the exposure of food to contamination.

3. It has provided an opportunity for the effective supervision of all tray service by the dietitian.

4. It has centralized not only equipment and service but also the storage of food stuffs.

5. It has decreased the per capita cost and at the same time it has improved the quality of the food served to bed patients.

With the passing of the floor diet and serving kitchens at Muirdale Sanatorium has been arranged a simple kitchenette on each hospital floor where the nurse finds facilities for preparing individual emergency light diets of varying descriptions. A small gas plate, refrigerator and cupboard for dishes constitute the equipment which occupies but little space and meets every requirement for food service not conveniently provided by the centralized tray service kitchen.

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### New Health Journal Makes Its Appearance in Canada

The *Hospital, Medical and Nursing World*, since 1912 the official organ of the hospital, medical and nursing fields for the provinces of Ontario, Alberta and British Columbia, has combined with *National Hygiene and Public Welfare* to form *Canadian Health*, a magazine published for physicians, nurses, welfare workers and the people. The first number was issued with the new year.

The enlarged journal, according to an editorial, "will seek to report for the man and woman on the street, some of the advances that are being made in the study of various preventable diseases; it will try to set forth in simple language how to retain good health and how to regain health in cases of illness. It will note progress in maternal and child welfare—in short everything that tends to the maintenance of good health among the Canadian people."

Sir W. Arbuthnot Lane, Bart., London, England, is the honorary editor. The editorial staff is made up of persons prominent in the medical, public health, hospital and nursing fields in Ontario, Quebec, Nova Scotia, Manitoba, Saskatchewan, Alberta and British Columbia.

# How Can the Cost of Sickness Be Equitably Distributed?\*

By CHRISTOPHER G. PARNALL, M.D.

Medical Director, Rochester General Hospital, Rochester, N. Y.

THE cost of medical service and hospital care, high though it may seem, is, after all, only one item in the total cost of sickness.

So much has been written in the lay press and in the medical periodicals of late that our eyes have been focused on only a part of the problem, and even persons of more than average intelligence have come to believe that this cost is unwarranted. The actual cost of sickness embraces not only what is paid out for physicians and hospital fees, but also the other expenses and economic losses incident to and resulting from illness.

In this paper I shall attempt to point out certain facts, already well known, showing that as far as the economic problem of sickness is concerned, the fundamental problem to be solved is not the cost but rather the burden of the cost. Some of the articles already referred to have been fault finding and not at all constructive. Some of them have been in the nature of a defense of present conditions and methods in medical and hospital practice. I am not attempting here to defend medicine or the hospitals. Neither am I attacking those who, in trying to prove their points, have relied on their own individual experiences, actual or imagined, or who, by stating half truths, have given wrong impressions.

## *The Hotel Versus the Hospital*

Since there is so much agitation, my position is that we should try honestly to find out what it is all about, and if evils exist to seek prompt and feasible remedies. In the first place, relatively, the costs are not high. That they seem high is no reason why we should immediately jump to the conclusion that they are high. If they are high now, they always have been high. We must judge them from the viewpoint of modern standards of living, and we must be careful and just in our comparisons. The frequent comparison of hospital care with hotel accommodations shows an utter lack of knowledge of hospital operation. The hotel exists to furnish

sleeping facilities and food service and to furnish that at a profit. This function is only incidental in a hospital and few hospitals return a profit. No person goes to a hotel unless he is prepared to pay and to pay promptly. If hospitals could be operated on the same principle as hotels, hospital costs would be something to write about.

## *Costs Exceed the Charges*

No one familiar with the actual facts will question the statement that hospital charges have not advanced in proportion to the costs the hospitals have had to pay. Contrary to the impression given by a celebrated surgeon, the hospitals of the country have done little whining. They have accepted conditions as they are and have done the best they could. Some hospitals have whined; some have been extravagant. Likewise, some surgeons have grown rich by making unnecessarily high charges, by performing unnecessary operations or by capitalizing reputations for superior skill. The great majority of hospitals and doctors, however, are honest and are trying to meet the needs of an increasingly exacting public.

Is it not noticeable that those who complain the loudest about the unreasonableness of hospital charges and the cost of medical and nursing care are usually those whose incomes have increased proportionately much more than have the hospital rates or the doctors' or nurses' fees? I know of but few hospitals that are making money, and I am acquainted with but few doctors who are getting rich. As for the nurses, especially those who are doing private duty, one who has a bank account is seldom found.

Hospitals must be a part of general community life. They must conform to existing standards of living. Most of us can recall when a horse and buggy at \$400 represented relative luxury in highway transportation. Such outfits, however, were never seen tied to hitching rails when a new hospital was under construction. Now adequate parking space must be provided for the automobiles for the building mechanics.

\*Read at the meeting of the Hospital Association of Pennsylvania, Pittsburgh, March, 1930.



I am not bemoaning the passing of the old days. I really envy the high class artisan with his shining, expensive automobile. The fact is that the average person to-day is better able, if employed, to pay for medical care than he was a decade ago. Unemployment with a consequent loss of income is the problem the modern wage earner must constantly face. If wages have doubled, the worker is no worse off if prices have doubled; but if prices have doubled and earning power has diminished or been cut off, the disparity between the cost and the ability to pay is greater than ever.

#### *Methods Must Be Simplified*

Then there are always new ways of spending money. Luxuries become necessities. If the necessity for expenditure in one direction no longer exists, the urge to spend in another is intensified. Modern living conditions create an increased demand for hospital care, but modern scientific medicine has made possible a shorter period of treatment when hospital care is needed. Certain diseases that heretofore meant an economic drain of incalculable magnitude have practically disappeared. In my student days in medicine typhoid fever was the classical medical condition for teaching. To-day medical students may graduate without ever having seen a case of typhoid. For the worker in industry, workmen's compensation has removed another bugbear of the not distant past. Occupational injuries to-day do not impoverish, let alone pauperize the worker.

The cost of medical care is a subject as much misunderstood as it is overworked. Although costs may not be relatively as high as some of our critics would have the public believe, there are certainly ways in which economies may be effected. Unnecessary building and equipment; expensive and highly decorative service; specialists; special nurses; false ideas of what is necessary; false pride; demand by patients for things they know they cannot afford—all have their bearing on the cost of medical care.

We should get down to the essentials and insist on a simplification of our methods. We must be practical and not expect too much either in the way of intelligent public cooperation or in gratitude for our efforts. If we preach economy, we should not expect the public always to practice it. If we do, we shall be disappointed. While economies doubtless can be worked out in personal service, in structures and in equipment and supplies, the total saving will relatively not be noticeable in the rates the hospitals will have to charge and the fees that doctors will have to get.

Moderately priced hospital accommodation is quite generally available and patients should be encouraged to take it rather than to insist on service for which they pay only with great difficulty. The problem will not be solved until some method or system is worked out under which the cost of sickness is equitably distributed. For the average person medical care is practically inevitable. Instead of closing our eyes then to the fact that it is inevitable and bewailing the cost when it has to be paid for, why not face the situation, analyze the facts and provide adequately for it?

Lee K. Frankel of the Metropolitan Life Insurance Company has recently published an interesting study undertaken for the Committee on the Cost of Medical Care which throws a good deal of light on the problem of the cost of sickness, particularly in workingmen's families. In an attempt to find out what the average workingman's family spends for illness, data were collected over a period of six months through the medium of uniform calendar forms distributed by Metropolitan nurses to the company's industrial policyholders. Returns were tabulated from 3,281 families. For the first six months' period of 1929 only 198 families, or 6 per cent, reported no expenditure as a result of sickness. More than one-third of the families spent less than \$25 and 80 per cent less than \$100 in the six months' period. One-fifth of the total number of families spent 64 per cent of the total. A large part of the total burden, therefore, was borne by a comparatively small group. Of the total of \$230,907 spent for the 3,281 families, \$98,000 was for physicians' fees; \$29,000 for medicine; \$18,000 for dental care; \$28,000 for hospital; \$4,815 for oculists; \$15,000 for operations; \$8,700 for nursing; \$1,255 for dispensary treatment and for extra household service necessitated by illness, \$24,800.

#### *Illness and the Average Family*

Forty-three per cent of the total expense went for doctors' fees. Eighty-two per cent of the families had service from private physicians during the six months. The amount of money expended for medicine slightly exceeded that for hospital care which represented about one-eighth of the total. If the data here presented can be considered as presenting a fair general average, even though the amounts may vary within a considerable range in various parts of the country and among various classes of the population, then the conclusion is obvious that slight illness imposes no great problem but that in a certain proportion of the population the cost of serious illness becomes a heavy burden on the economic



resources of the average family. As stated by Mr. Frankel, "The data indicate clearly one fundamental fact, namely, that sickness is a hazard of life comparable to other hazards, such as death and accident."

#### *Meeting the Costs of Sickness and Health*

We might go a little further and say that health is a blessing of life comparable to other blessings such as education, transportation and security. How best to cope with the hazards and enjoy the blessings is a problem we must face. Is it not rather obvious that the cost of both must be met through combination and social organization? Cost of education would be just as much a subject for general protest as is the cost of medical care if the individual receiving its benefits had to pay all its costs and to pay at irregular and inconvenient times. We don't do much complaining about the cost of fire protection. It is a community matter, shared by all, and loss from fire is further guarded against by insurance which in effect is a grouping or pooling of interests, a sharing of risks.

As for public health protection, we provide it as we do fire protection, through public taxation. When it comes to personal health we wait until we are stricken and then complain because we think we have to pay excessive costs for care. It would be equally sensible, after taxing ourselves to provide a fire department to protect our neighbor's house from igniting from the sparks of our own flaming domicile, to bewail our loss because we carried no fire insurance.

It would be little more difficult to determine the cost of the risk of sickness than that of fire or of death. If the burden of the cost of sickness were distributed, no one would seriously mind the cost. How can the burden be spread? Numerous instances may be cited where the cost of sickness in some measures is distributed instead of falling on those who are ill, at times when they are ill. In twenty European countries health insurance is a state function and service is provided at public expense, at least for a limited group of the population. In these countries, moreover, health insurance is generally regarded as a great boon. Probably none of the European types would be desirable for American application. Public health protection through organized health departments has grown tremendously in this country in the last fifteen years and, incidentally, without any great organized assistance from the medical profession or the hospitals.

Industrial medicine, with provision for medical and hospital service for workers and their families, has become a recognized system in provision

for sickness among the industrial working class. There is really nothing new about it at that. In the mining community in which I was born, there existed an organized plan, supported by contributions from the employer and the employed, under which medical care was available without cost other than the regular assessment taken out of the monthly pay. And the service under such a plan (which still continues after more than fifty years) was not slipshod, perfunctory on the part of the physician or inadequate, nor were the doctors second-rate men. The one who saw me into the world was a fine type of practitioner and I have known many leaders in scientific medicine and of highest ethical standards among mine physicians.

Numerous universities have organized health services supported by relatively small fees paid by the students. The quality of medical service under such plans is generally good, better, I believe, than that received by the average citizen from private physicians. Hospital care also is assured, if needed.

These instances of sickness insurance on a limited scale are mentioned only to indicate that there are plans already in operation that have been and are successful. They are satisfactory to the insured and likewise to the doctors who render service under them.

#### *What Relief May Be Promised?*

The public is getting restive and is demanding relief from what is generally thought to be excessive cost of illness. Can it get the relief, and how? I think the question can be answered in the affirmative and that the only way is through insurance in some form or other. I can see only three forms:

1. Group insurance as in industry, voluntary in principle.
2. Endowment on a large scale.
3. Public compulsory health insurance.

We have the two former and they are not of sufficient scope to cover the needs. Now, let us consider state medicine, and by this term I mean medical service, embracing hospital care and all the adjunct activities necessary to provide for the care of sickness and the prevention of disease, supplied at public expense through taxation. I am not advocating state medicine. I am only trying to face the facts. Private practice under a contractual relationship between the patient and physician undoubtedly has its advantages, and unquestionably for those able to pay its cost it will continue to be the accepted method. But for the wage working majority, the large class of those of moderate means who find it in-

creasingly burdensome to meet the cost of sickness as they must under existing social and economic conditions, there will have to be a new order.

I do advocate and advocate most earnestly that we, who should know best how to approach this problem of distributing the cost of sickness, give serious thought to what is happening and be prepared if state medicine comes, to see that it is in a form that will be helpful and not harmful. I am afraid of the brand of state medicine that might be imposed on us by politicians and misguided reformers, but I really cannot see that state medicine in the form of insurance against sickness under which there is free choice by the patient of his physician and his hospital, if he needs hospital care, and in which every one must share, will do any great harm. Indeed it might conceivably be the salvation of the medical profession and the hospitals. Charity work as such would of course be largely done away with. As is the case with industrial accident insurance under compensation laws, the patient would be no longer a subject for gratuitous relief and the doctors and hospitals would be sure of their payment for service rendered. All kinds of dire results were predicted with the advent of workmen's compensation, but practically all of the states of the Union now have it and the medical profession, far from being injured, has benefited greatly.

#### *A Liberal Attitude Is Necessary*

In this country we should adopt more of the attitude of the medical profession of Canada. I am indebted to Dr. T. C. Routley, general secretary, Canadian Medical Association, for the information that the organized profession of Canada has been asked by the government to assist in a national survey on the subject of state health insurance. The Canadian Medical Association through its secretary has indicated its willingness to participate in such a survey. Already there is agreement that if any system is adopted, it should provide complete service. It should include not only industrial workers, but their families also. It has also been established as a basic principle that there should be free choice of physician by patient and of the patient by the physician, and that every legally qualified physician should be eligible to practice under any proposed act and that payment should be for services rendered according to an acceptable schedule of fees. Canada is likely to have a system of state health insurance, but if it does, it will be a system satisfactory to the medical profession of the Dominion, and one the medical pro-

fession has had a part in framing. If such a system is evolved, it will presumably be advantageous to the public. After all, nothing that is actually detrimental to the medical profession will be good for the public.

In this country the interests of the hospitals and of the doctors are similar if not identical, but hospital and doctors alike must realize that they are not the ends but only the means. The public is not interested in preserving any of our prerogatives or traditions. We must become more socially conscious and try to meet the public need, if public need exists. We must be active in developing more constructive leadership in meeting this problem of the distribution of the burden of the cost of sickness. Some method of distributing is bound to come, and it is desirable, whatever its form, that it be sound economically and socially, and suited to meet the requirements of American life.

### Noted Advances Made in the Treatment of the Insane

The state hospital system adequately performs its function. But the standards and the science of the care and treatment of the insane are constantly advancing. The hospitals must have adequate support if they are to keep abreast, says Dr. George H. Freeman, superintendent, St. Peter Hospital for Insane, St. Peter, Minn., in an article in the *United States Daily*.

Recognizing the benefit of centralized authority, the Minnesota state hospitals are under the direction of the state board of control, rather than under that of a separate governing body for each institution.

"That the problem was a medical one has always been recognized in Minnesota," says Doctor Freeman. "The first hospital superintendent was a physician, and physicians have ever since been in charge of the hospitals.

"Training schools for nurses were established at the state hospitals in 1889 and have been constantly in operation since. For years, a two-year course in nursing was offered.

"With the rising standards of nursing education and its general recognition as a profession, there has been a reorganization of the state hospital training schools conforming to these modern requirements, and there is now offered a three-year course, with the third year spent in affiliated special and general hospitals. Graduates of our school are now eligible for registration, just as if they had spent their three years of training in a general hospital.

"Indeed, the tables are turning. Within a comparatively short time, I believe, the general hospitals will require their student nurses to spend a certain amount of time in hospitals for mental disorder."

The Minnesota state hospital system consists of three hospitals at St. Peter, Rochester and Fergus Falls, and three asylums or colonies at Willmar, Anoka and Hastings. The total number of patients under treatment is 7,800 with an admission rate of 1,600 and a total of 1,200 on parole.



# The Increasing Popularity of Accounting Machines

By CHARLES A. WORDELL

Manager, St. Luke's Hospital, Chicago

**E**CONOMIES demonstrated in commercial accounting through the use of posting machines have induced several hospital superintendents to install these machines in hospital accounting departments. Automatic bookkeeping machines are especially well adapted for the accounts receivable of individual patients, although they may also be used to post accounts payable and for perpetual inventory records in stores control.

In many hospitals, the use of posting machines will reduce the clerical costs of the accounting department. There is the further advantage that totals are automatically accumulated each day and that cross balances are automatically computed. The drudgery of many computations is needless. Moreover, the control figures on revenue or cash are available at any time during the day. The availability of these figures is especially helpful in the compilation of the daily report for the superintendent. This daily report, which gives the administrator a complete picture of conditions in the institution, usually is placed on the superintendent's desk each morning. It shows the patient census of the institution, earnings of the previous day, earnings of the month to date and bank balances. If a bookkeeping machine is used, the compilation of this report is no longer a burden to the accounting department.

## *Current Analyses of Daily Progress*

Contrary to the general impression, the chief function of an accounting system is not the development of a historical record of financial transactions. Volumes of records which date back to the organization of the institution and which are regarded merely as records are cold and dead. A vital and dynamic system should be used as the basis for current analyses of daily progress in the hospital. To facilitate this purpose, posting machines are of real value.

Accounting machines are available at prices ranging from \$1,000 to \$3,000. They can be adapted to almost any variety of hospital accounting. They will handle forms varying in width from eleven inches to twenty-four inches. The

number of computing registers varies from one to twenty-nine. On such machines all types of accounting entries may be made. There are other machines available that are adapted for use primarily with accounts receivable.

## *Benefits, Tangible and Intangible*

It is difficult to set an arbitrary point at which a hospital will profit from the installation of an accounting machine. Two hospitals, each with the same number of beds and patients, might use different numbers of clerks in their respective accounting departments. In general it may be said that if the installation of a bookkeeping machine will make possible the reduction of the accounting staff by at least one bookkeeper, the machine will soon pay for itself. This saving is entirely additional to the more intangible benefits of an accurate daily report that shows the facts of the previous day's business, of speed, legibility, neatness, accuracy and simplicity in posting all regular accounts. Many hospital superintendents hold that these advantages are worth the investment in machinery, even though they are unable to reduce their clerical forces.

Automatic cross balancing of figures as they are written in vertical columns of journal sheets is one of the important innovations of bookkeeping machines. A cross computing register automatically adds or subtracts crosswise the amounts in all of the columns in the forms, or any number of them, simultaneously with the writing of the amounts. On the largest of these machines, from one to twenty-nine different columns of either quantity or money values may be thus cross balanced. In computing a patient's account, the register will automatically add a charge to the previous balance and subtract any credits for amounts paid by the patient, thereby computing the new balance. There are also column total registers which accumulate individual totals of the amounts written in each vertical column. They are supplied in many different sizes, and the size of the grand total required for each column in the forms governs the size of the register selected.



In addition to accumulating individual column totals, any or all of the registers may be connected with the cross computing register. Thus all amounts written in register columns so connected may also be automatically cross added, subtracted and balanced as they are typed. Through the simple operation of typing, amounts may be totaled automatically in vertical columns and simultaneously cross balanced.

There is practically no limit to the number of forms and copies that may be posted at one operation. In posting a patient's bill, for instance, the statement for the patient, the loose-leaf sheet for the accounts receivable or customers' ledger, the journal distribution and the record of cash receipts may all be posted at the same time. In posting a purchase of supplies or equipment, the check in payment of the goods, the remittance statement for the vendor, the accounts payable or purchase ledger and the journal distribution may all be posted at the same time. If the operator has sufficient time, he may also record on the same machine the perpetual inventory cards that form the basis for storeroom control.

#### *Posting Machines Are Widely Used*

Posting machines are most widely used in hospitals to record accounts receivable. The methods of recording accounts receivable vary with different industries and often with different establishments in the same industry. The accounting plan is affected largely by three factors: the number of customers' accounts, this factor being dependent upon the size and percentage of occupancy of the hospital; the volume of debits and credits to the customers' accounts; the policies or ideals of the accounting office.

It is interesting to compare the requirements for the handling of patients' accounts in a large hospital with the machine methods and special systems that are being generally adopted in business organizations.

In a recent study of the patients' accounting work in St. Luke's Hospital, Chicago, it was found that with the large number of patients, the volume of charges and credits to their accounts and the difficulties usually inherent in these conditions, a revised accounting plan that would take advantage of mechanical devices was necessary. Accordingly, the hospital has installed a patients' accounting system that has many of the elements of the plans in use in large business establishments.

This plan provides for an account ticket procedure by which all charges to patients from all departments of the hospital are entered on a charge ticket which is prepared in duplicate. The

tickets are numbered serially. One copy is dispatched immediately to the accounting office. The other copy is held in the originating department for further reference when the ticket control and audit procedure require it.

In the accounting office, the account tickets are sorted by room or ward numbers and are then posted to ledger cards that in the meantime have been prepared from the admission records. The ledger cards and a statement for the patient are

TABLE SHOWING THE CLASSIFICATION OF REVENUE FOR ST. LUKE'S HOSPITAL, CHICAGO

<i>Operating Revenue</i>	<i>Abbreviation</i>
401. Board and room of patients, private rooms .....	PRVRM
402. Board and room of patients, semiprivate rooms .....	SPRRM
403. Board and room of patients, wards .....	WARD
404. Pathological laboratory ....	LABTY
405. X-ray .....	X-RAY
406. Cardiographic and metabolic laboratory .....	METAB
407. Operating room .....	OPRRM
408. Delivery room .....	DELRM
409. Anesthesia .....	ANEST
410. Drugs and medicines .....	MEDCN
411. Physiotherapy .....	PHYTH
412. Telephone and telegraph ....	PHONE
413. Board of special nurses ....	NURBD
414. Extra meals .....	MEALS
415. Barber .....	BARBR
420. Miscellaneous	
421. Laundry .....	LNDRY
422. Cots .....	COT
423. Newspapers .....	NEWS
424. Mineral water and ginger ale .....	BVRGS
425. Ambulance .....	AMBUL
426. Braces .....	BRACE
427. Casts .....	CAST
428. Dressings .....	DRESS
429. Miscellaneous charges	MISC

posted simultaneously with one operation on a posting machine. This machine posts and obtains account and control totals at the same time by classes of revenue, and indicates the nature of each transaction. It prepares also a proof tape or registration of all the transactions as they are posted. The classification of the revenue for St. Luke's Hospital with the abbreviations that are printed on the patients' statements and on the ledger are shown in the accompanying table.

The revenue classification in any system of machine bookkeeping should follow as closely as possible the suggested classification of the committee on accounting of the American Hospital Association. As payments are received either from the patients as they leave the hospital or

by mail after they have left, receipts are written in duplicate under numerical control. One copy is given to the patient and the other copy is the official cash record. The cash record copies are sorted by room or ward number and the credits are posted to the statement for the patient and the ledger sheet at the same operation.

This improved method of handling patients' accounts has several advantages. Charges are received hourly from the various departments of the hospital and are posted promptly to the patients' accounts. Totals are accumulated throughout the day so that the control figures are available at any time on revenue or on cash. Notwithstanding the large volume of charges and credits handled daily in an institution of this kind, the work is carried on expeditiously. Statements are ready for patients when they leave the hospital so that payment may be made without undue delay. To facilitate the handling of charges and of cash, a pneumatic tube carries the required papers between the accounting office and the other departments.

#### *Frequent Posting Is Necessary*

The handling of accounts of patients differs somewhat from that of accounts receivable in some other industries or institutions, because it is necessary to post frequently to all accounts. Usually in the handling of accounts receivable it is unnecessary to post to the accounts of all customers so frequently. In the case of hospital accounts for patients one or more entries are made to each account during the period the patient is in the hospital. As a result, a large portion of the patients' accounts, or accounts receivable records, are actively used every day.

The process of balancing and of maintaining accuracy and control over the ledger work is somewhat lengthened. The use of the posting machine and the supplementing of the work of the cashier and day operator by that of a night auditor who completes the posting, draws off the balances, compiles the control figures and audits accounts for discrepancies and errors, are important features of our system.

Accounting machines have been used extensively, of course, for savings accounts in banks, for guests' accounts in hotels and for customers' accounts in merchandising establishments. Their use, however, for patients' accounts in hospitals, with the related procedures that have been briefly described, is not so common. It is reasonable to believe that as the advantages of economy in clerical labor and costs, of accuracy and of neatness become more widely known, the use of accounting machines will increase.

## Medical Society Opposes Medical Program of Rosenwald Fund

The plan of Julius Rosenwald, Chicago, to provide at a moderate cost medical treatment and hospital care for persons of moderate means, is meeting with opposition on the part of the Chicago Medical Society which, through its secretary, Dr. N. S. Davis III, takes exception to the views of Edwin R. Embree, director of the Rosenwald Fund, concerning the high cost of medical care and the measures the fund believes would be useful in meeting the problem, according to the *Chicago Tribune*.

The report of the Rosenwald Fund, which reviews the activities of the fund to June 30, 1929, sets forth its medical program as follows:

"1. Pay clinics for persons of moderate means in which patients pay fees approximating cost, including remuneration for the physicians.

"2. Hospital projects for bed care of persons of moderate means, in which there is provision for dealing with the patient's total bill, that is, both institutional charges and professional fees.

"3. Medical, dental or nursing services for small communities or special groups, worked out in cooperation with medical societies and other organizations.

"4. Experiments in the application of the principle of voluntary insurance or installment payment in meeting the sickness bill."

To this Doctor Davis replies:

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"It is believed that the medical profession would cooperate wholeheartedly if you had such a program."

## Venice Has Seaside Hospital

Not long ago, there was erected along the seashore, the Lido, of Venice, a group of buildings known as the *Ospedale al Mare*, or seaside hospital.

According to the *Journal of the American Medical Association*, the hospital has 2,000 beds available, a large number of which are for clinical patients, and during the past year it recorded a total of 304,000 days of treatment. The buildings comprise a seaside hospice, a training center for rachitic patients, pavilions for the various forms of treatment, infirmaries and terraces for heliotherapy.



In addition to accumulating individual column totals, any or all of the registers may be connected with the cross computing register. Thus all amounts written in register columns so connected may also be automatically cross added, subtracted and balanced as they are typed. Through the simple operation of typing, amounts may be totaled automatically in vertical columns and simultaneously cross balanced.

There is practically no limit to the number of forms and copies that may be posted at one operation. In posting a patient's bill, for instance, the statement for the patient, the loose-leaf sheet for the accounts receivable or customers' ledger, the journal distribution and the record of cash receipts may all be posted at the same time. In posting a purchase of supplies or equipment, the check in payment of the goods, the remittance statement for the vendor, the accounts payable or purchase ledger and the journal distribution may all be posted at the same time. If the operator has sufficient time, he may also record on the same machine the perpetual inventory cards that form the basis for storeroom control.

#### *Posting Machines Are Widely Used*

Posting machines are most widely used in hospitals to record accounts receivable. The methods of recording accounts receivable vary with different industries and often with different establishments in the same industry. The accounting plan is affected largely by three factors: the number of customers' accounts, this factor being dependent upon the size and percentage of occupancy of the hospital; the volume of debits and credits to the customers' accounts; the policies or ideals of the accounting office.

It is interesting to compare the requirements for the handling of patients' accounts in a large hospital with the machine methods and special systems that are being generally adopted in business organizations.

In a recent study of the patients' accounting work in St. Luke's Hospital, Chicago, it was found that with the large number of patients, the volume of charges and credits to their accounts and the difficulties usually inherent in these conditions, a revised accounting plan that would take advantage of mechanical devices was necessary. Accordingly, the hospital has installed a patients' accounting system that has many of the elements of the plans in use in large business establishments.

This plan provides for an account ticket procedure by which all charges to patients from all departments of the hospital are entered on a charge ticket which is prepared in duplicate. The

tickets are numbered serially. One copy is dispatched immediately to the accounting office. The other copy is held in the originating department for further reference when the ticket control and audit procedure require it.

In the accounting office, the account tickets are sorted by room or ward numbers and are then posted to ledger cards that in the meantime have been prepared from the admission records. The ledger cards and a statement for the patient are

TABLE SHOWING THE CLASSIFICATION OF REVENUE FOR ST. LUKE'S HOSPITAL, CHICAGO

<i>Operating Revenue</i>	<i>Abbreviation</i>
401. Board and room of patients, private rooms .....	PRVRM
402. Board and room of patients, semiprivate rooms .....	SPRRM
403. Board and room of patients, wards .....	WARD
404. Pathological laboratory ....	LABTY
405. X-ray .....	X-RAY
406. Cardiographic and metabolic laboratory .....	METAB
407. Operating room .....	OPRRM
408. Delivery room .....	DELRM
409. Anesthesia .....	ANEST
410. Drugs and medicines .....	MEDCN
411. Physiotherapy .....	PHYTH
412. Telephone and telegraph ....	PHONE
413. Board of special nurses ....	NURBD
414. Extra meals .....	MEALS
415. Barber .....	BARBR
420. Miscellaneous	
421. Laundry .....	LNDRY
422. Cots .....	COT
423. Newspapers .....	NEWS
424. Mineral water and ginger ale .....	BVRGS
425. Ambulance .....	AMBUL
426. Braces .....	BRACE
427. Casts .....	CAST
428. Dressings .....	DRESS
429. Miscellaneous charges	MISC

posted simultaneously with one operation on a posting machine. This machine posts and obtains account and control totals at the same time by classes of revenue, and indicates the nature of each transaction. It prepares also a proof tape or registration of all the transactions as they are posted. The classification of the revenue for St. Luke's Hospital with the abbreviations that are printed on the patients' statements and on the ledger are shown in the accompanying table.

The revenue classification in any system of machine bookkeeping should follow as closely as possible the suggested classification of the committee on accounting of the American Hospital Association. As payments are received either from the patients as they leave the hospital or



by mail after they have left, receipts are written in duplicate under numerical control. One copy is given to the patient and the other copy is the official cash record. The cash record copies are sorted by room or ward number and the credits are posted to the statement for the patient and the ledger sheet at the same operation.

This improved method of handling patients' accounts has several advantages. Charges are received hourly from the various departments of the hospital and are posted promptly to the patients' accounts. Totals are accumulated throughout the day so that the control figures are available at any time on revenue or on cash. Notwithstanding the large volume of charges and credits handled daily in an institution of this kind, the work is carried on expeditiously. Statements are ready for patients when they leave the hospital so that payment may be made without undue delay. To facilitate the handling of charges and of cash, a pneumatic tube carries the required papers between the accounting office and the other departments.

#### *Frequent Posting Is Necessary*

The handling of accounts of patients differs somewhat from that of accounts receivable in some other industries or institutions, because it is necessary to post frequently to all accounts. Usually in the handling of accounts receivable it is unnecessary to post to the accounts of all customers so frequently. In the case of hospital accounts for patients one or more entries are made to each account during the period the patient is in the hospital. As a result, a large portion of the patients' accounts, or accounts receivable records, are actively used every day.

The process of balancing and of maintaining accuracy and control over the ledger work is somewhat lengthened. The use of the posting machine and the supplementing of the work of the cashier and day operator by that of a night auditor who completes the posting, draws off the balances, compiles the control figures and audits accounts for discrepancies and errors, are important features of our system.

Accounting machines have been used extensively, of course, for savings accounts in banks, for guests' accounts in hotels and for customers' accounts in merchandising establishments. Their use, however, for patients' accounts in hospitals, with the related procedures that have been briefly described, is not so common. It is reasonable to believe that as the advantages of economy in clerical labor and costs, of accuracy and of neatness become more widely known, the use of accounting machines will increase.

## Medical Society Opposes Medical Program of Rosenwald Fund

The plan of Julius Rosenwald, Chicago, to provide at a moderate cost medical treatment and hospital care for persons of moderate means, is meeting with opposition on the part of the Chicago Medical Society which, through its secretary, Dr. N. S. Davis III, takes exception to the views of Edwin R. Embree, director of the Rosenwald Fund, concerning the high cost of medical care and the measures the fund believes would be useful in meeting the problem, according to the *Chicago Tribune*.

The report of the Rosenwald Fund, which reviews the activities of the fund to June 30, 1929, sets forth its medical program as follows:

"1. Pay clinics for persons of moderate means in which patients pay fees approximating cost, including remuneration for the physicians.

"2. Hospital projects for bed care of persons of moderate means, in which there is provision for dealing with the patient's total bill, that is, both institutional charges and professional fees.

"3. Medical, dental or nursing services for small communities or special groups, worked out in cooperation with medical societies and other organizations.

"4. Experiments in the application of the principle of voluntary insurance or installment payment in meeting the sickness bill."

To this Doctor Davis replies:

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# Abstracts of Hospital Literature From Foreign Countries

A Department Conducted by E. M. BLUESTONE, M.D.

Director, Montefiore Hospital, New York City

*NUTRITION, DIET KITCHENS, DIETS*  
By L. Kuttner, K. Isaac-Krieger, D. Kwilecki,  
*Handbucherei Für Das Gesamte Krankenhaus-*  
*wesen VI, Published by Julius Springer,*  
*Berlin, 1930<sup>1</sup>*

THIS comprehensive booklet, covering the field of the organization and work of the fast developing dietary departments of German hospitals, is divided into three sections. It starts with a clearly expressed and elementary and fundamental discussion of the nutritional needs of the body and the nutritional values of various types of food.

The second part discusses hospital dietaries, beginning with the routine diets, full diets, soft diets with or without meat, and "fever diets," which are semiliquid in consistency. It next lists test diets, among them the familiar Schmidt diet and Ewald Boas test meal, and various others. These are followed with specific directions for the giving of various special diets. These include diets for use in the treatment of stomach conditions, constipation, diabetes mellitus, gout, nephritis, obesity, emaciation, tuberculosis and the high purin diet in pernicious anemia.

An interesting table is given in connection with diabetic diets, in which the carbohydrate values of various foods are given in comparison with the amount of carbohydrate in twenty grams of white bread. This table would be useful in teaching either patients or nurses. It is also noteworthy that in the discussion of the diet in nephritis, the caution is expressed that no patient should be kept for more than a few days on a diet containing less than fifty grams of protein, his probable protein requirement. This emphasis on the fact that the normal nutritional requirements of the patient must always be met in spite of any restrictions that may be imposed, is stressed several times.

The third section of the book, which deals with diet kitchens, discusses the necessity for training dietitians to take charge of such units. Such training is now being offered in one year courses,

either to nurses or to other persons with the equivalent of ten years' previous schooling and a good knowledge of cookery and food preparation. This dietitian should be expected to take full charge of the personnel and the work of the diet kitchen.

Several photographs and floor plans of existing diet kitchens are given, as well as the plan and the equipment list of an ideal unit. The most striking thing about these kitchens is the large number of special diets they are expected to prepare and, in the case of the ideal plan, the large amount of floor space that is to be occupied and the elaborateness of the equipment. No list of the personnel required to operate such a diet kitchen is given, but it must certainly outnumber that which we in the United States are accustomed to think we can afford to staff a special diet kitchen.

The principle of these diet kitchens seems to be to treat the patient as an individual, but to make up his diet from the general scheme of foods prepared on the menu with a constant view to economy.

Although the booklet contains several minor errors, it seems to be fundamentally sound. It may be of interest to an American dietitian as a comparison of the development of the profession in this country and in Germany, although it will hardly make any addition to her fund of information.

## THE HOSPITALS IN AMSTERDAM

By J. L. C. Wortman, M.D.

After having described the general hospitals of Amsterdam in previous numbers of *Het Ziekenhuiswezen*, the author begins a new chapter on special hospitals. A number of institutions are qualified for classification as special hospitals which aim at treatment and research in definite groups of disease. First of all, there is the Cancer Institute which is called the Antoni van Leeuwenhoek Huis after the famous inventor of the microscope.

After the war the cancer committee induced the government to turn over to their uses the

<sup>1</sup> This review of "Nutrition, Diet Kitchens, Diet," was written by Mary W. Northrop, supervising dietitian, Montefiore Hospital, New York City.



military hospital that had just been closed. The hospital was completely remodeled. Arrangements were made for three research departments—pathology, biochemistry and physics. The histological laboratories of the Municipal University were added to this institution. Beds for forty patients and an out-patient department with large radiographic and surgical departments are connected with the research building.

The second institution described is the Emma-Kinderziekenhuis, a hospital for infants and children under the auspices of the queen mother. Although it is equipped with modern scientific apparatus, managed by medical experts and provided with a splendid nursing staff, the building, erected in the last century, is now out of date.

In the March number of *Het Ziekenhuiswezen* Doctor Wortman completes his series of articles on this subject with a description of three special hospitals: the Neuropsychiatric Clinic, the Hospital for Epileptics and the Maternity Hospital and State School for Midwives.

The Neuropsychiatric Clinic is a teaching hospital and is part of the (Calvinistic) University of Amsterdam. It has an intimate relation to the Christian asylums in the country. The details concerning this clinic have been published by Prof. L. Bowman in one of the publications of the Rockefeller Foundation issued in April, 1925.

The Hospital for Epileptics is a private institution open to give ward and out-patient service to patients suffering from the earliest stages of epilepsy. The institution was founded mainly for the purpose of research into the causes and treatment of this disease. The hospital is especially equipped for the management of this type of patient and has spacious gardens, recreation rooms and a department for occupational therapy. The nursing of these patients is in the hands of specially trained personnel, who are equipped by training to handle the mental aspects of this disease.

The Maternity Hospital and State School for Midwives is one of three schools in the country based on the same working scheme. Pupils are admitted after the successful completion of state examinations and serve an apprenticeship of three years. The first year is devoted to theoretical subjects and the curriculum shows courses in anatomy, physiology, bacteriology, obstetrics, physics and chemistry. The curriculum for the second year is identified with most of the work in the clinic. During the third year the pupils assist at deliveries under the guidance of municipal midwives. During this year clinical lectures on the phantom alternate with theoretical lectures on nursing problems of maternity cases.

The author points out that a thorough training of midwives in Holland is considered of great importance, since most of the population in that country depends on midwives for obstetrical assistance.

The article is beautifully illustrated with interior and exterior photographs, and ground plans are shown for the more important sections of the hospital.

#### DAS BRANDENBURGISCHE TUBERKULOSEKRANKENHAUS IN THE CITY OF TREUENBRIETZEN, PROVINCE OF BRANDENBURG, GERMANY<sup>1</sup>

"Das Brandenburgische Tuberkulosekrankenhaus in the City of Treuenbrietzen, Province of Brandenburg, Germany," is a description of that institution with particular emphasis on the hygienic layout. It is published by the *German Architectural Magazine* under the authorship of Richard Lang, state architect, in collaboration with the director of the institution, Doctor Riemann, and the physician-in-chief, Doctor Wohlfarth.

According to this interesting pamphlet a unique institution is functioning in Treuenbrietzen. It consists of three parts: a working home for the homeless poor; a hospital for women and children up to sixteen years of age who are suffering with pulmonary tuberculosis; a hospital for men suffering with tuberculosis.

The applicant for admission to the working home must agree on application to remain in the home for a certain length of time without compensation. The home, which took eight months to build, was opened to the public at the end of 1914. It contains 233 beds. The cost, including equipment, was about \$400 a bed.

The construction of the other two parts of this institution, the sections for tuberculous patients, was begun shortly before the World War and completed in 1916, after which time it was used for a short period for soldiers suffering with tuberculosis. Despite the rising costs of construction during the war, the expense for putting up these buildings, including equipment, was less than \$900 a bed.

It was the original intention of the management to admit severe chronic cases other than tuberculosis to these institutions, but this plan met with disaster because the patients refused to be placed in "houses of death."

The description of the institutions as a whole gives the impression of completeness.

<sup>1</sup> Reviewed by M. D. Goodman.



## *Practical Administrative Problems:* **How to Save Money in the Heat, Light and Power Department**

By JOSEPH C. DOANE, M.D.

Medical Director, Jewish Hospital, Philadelphia

THE major portions of the hospital dollar are spent in paying personnel salaries, in purchasing food and in providing heat, light and power. It is usual to spend from 40 to 50 per cent of the gross per capita cost for personnel services, 25 per cent for food and from 14 to 16 per cent for the heating and lighting of institutional buildings and in maintaining them in the proper state of repair. It can be seen, therefore, that any improvement in the efficiency of this department offers at once an opportunity to save a considerable sum of money annually.

But the presence of warm and light buildings and the absence of faulty and leaking plumbing are conditions that are often not properly appreciated, at least from the angle of production costs. When pure water flows from a hundred spigots at the mere turn of the wrist, the complicated and expensive processes necessary to make this possible are likely to be forgotten. When high pressure steam is continually available for the sterilization of instruments, the cooking of foods and the driving of machinery, the necessity therefor is immediately conceded but the expense is often given little consideration.

### *A Little Understood Department*

No department of the hospital is more basically necessary than the one that is now under discussion. By the same token, it may be said that few departments are less understood by the members of the hospital personnel generally, as to their organization and functioning. It has become the custom in some institutions for each new class of probationers to be given a tour of inspection of the hospital, when the machinery and methods necessary for the production of steam and the manufacture of electricity are demonstrated and explained. When the nurse, at the beginning of her course, is brought to understand the expense necessary for the conduct of the power house, she is less likely to waste water and more likely to protect the complicated sterilizing and cooking apparatus she is required to use later.

The organization of this department varies considerably throughout the hospital field. In some institutions, all those whose duties relate

either to the repair or to the maintenance of hospital property answer to the chief engineer. There are, however, many policies, the adoption or rejection of which will determine not only the organization of this department but also the number and necessary training of the members of its personnel. Several basic problems immediately present themselves to a board of trustees that is contemplating the construction of a new hospital or the reorganization of an old one.

### *Shall the Hospital Produce Its Power?*

Should the hospital make or buy its steam for heating and sterilizing, and its electricity for light and power? In the industrial field, the adoption of a plan of cooperative effort has resulted in some instances in the construction of a central power house which may supply steam and electricity to various near-by manufacturing plants. It is a common practice for groups of homes to receive their heat from a central plant. Electricity is a commodity that no householder would attempt, except in rural districts, to produce for himself.

But it is at once evident that the requirements of the hospital vary materially from those of a manufacturing establishment. The hospital requires electricity and steam, not ten but twenty-four hours a day. The hospital needs both high and low pressure steam. It requires electricity at a time of day when manufacturing plants are closed. It needs the greatest amount of steam for heating, cooking, sterilizing and cleaning at a time when it requires the least electricity. Its laundry draws heaviest on its available steam supply in the morning and afternoon hours. Yet when night falls elevators must still be used and instruments sterilized. Not until midnight arrives does the engineer note that the needles of his steam gauges tend to climb without a full fire under his boilers.

Even then the urgent demand for that costly commodity, steam, is lessened only for a few hours. Often long before daybreak the use of steam cookers needed to prepare the hospital's food for the day requires that boiler fires must again be actively stoked. To meet this pressing

need, the superintendent of the hospital is often sorely perplexed, not only as to the best method of conducting his power plant but often as to the means of procuring money to meet the barest of necessities from the standpoint of the purchase of machinery and of its proper maintenance and upkeep.

The size of the institution determines largely the question of whether it is more economical to manufacture or to purchase steam for heating, and electricity for lighting. The location of the institution in relation to its distance from utility and public service companies is also a determining factor. The cost of labor in the immediate vicinity is an important consideration.

#### *By-Products That May Be Utilized*

On the other hand, it may be said that there are many valuable by-products that can be utilized to advantage if the institution has its own power plant. Exhaust steam may be used for heating and may be considered, therefore, a money saving by-product of the manufacture of electricity. Power house workers, at the times they are not concerned with supervising the functioning of the machinery, may serve a useful purpose in performing repair and maintenance work. The repair of sterilizing equipment, hospital apparatus and even the manufacture of furniture and equipment useful in the treatment of the sick are all valuable services that may be rendered at little extra cost by those attached to this department. It is an expensive, as well as an ineffective procedure for a hospital of fifty or more beds to be required to send to near-by plumbing shops for aid when minor repairs are needed about the institution. The service is less prompt than is the case when more or less skilled labor is at hand.

The cost of purchasing these commodities depends somewhat on the location of the hospital and the expense of producing steam and of manufacturing electricity. Some institutions secure electricity for as low as one cent a kilowatt hour. Others, beginning at from two to three cents a kilowatt hour, eventually reach a minimum figure after a certain fixed amount of electricity has been used. Steam is purchased in some instances for from eighty cents to \$1 for 1,000 cubic feet. Here again a sliding scale is often effective and the amount used will somewhat determine the economy of buying it. Such a decision can be reached only after a careful computation of construction costs which must take into account the probabilities of the future needs of the institution.

Since the expense of building and furnishing a power plant is considerable, the interest on the money thus spent, plus the later cost of manning

such a building, must be carefully compared with the outlay of money required to purchase light and heat. In some institutions it has been found advisable during the summer months to produce only the high pressure steam required for cooking and sterilizing and to shut down generators and purchase electricity for light and power. This is particularly the practice where low pressure or exhaust steam is used for heating. When steam and electricity can be purchased as cheaply as it can be produced, a great load is lifted from the shoulders of the superintendent since he must continually labor under the threat of a breakdown in the power plant, an occurrence that produces embarrassing, if not disastrous results in the care of the sick.

The chief engineer usually answers to the superintendent or to the assistant superintendent from whom he receives his orders directly. A situation that exists in some institutions needs only to be mentioned to be condemned. When a board committee on property and maintenance has become accustomed to deal directly with the chief engineer, efficiency departs and friction enters. This usually results when the name of an engineer of distinction appears on the board roster and he, forgetful of the policies of good administration he follows in his business, desires to deal with the chief engineer around the desk of the superintendent.

#### *The Chief Engineer and His Helpers*

The chief engineer is one of the key members of the hospital personnel. His importance and that of his department have been suggested. Yet frequently there is found occupying this important position a man with no particular training insofar as the basic mechanical and chemical phases of his work are concerned. Notwithstanding this drawback, he is apt to be honest, faithful and hard working. Sometimes he has come to the hospital from the field of industry. Often he has been responsible for the power plant machinery of a hotel or an apartment house. Usually he is more practically than didactically educated and has little idea of why his machinery so easily performs the work required of it. He is confounded when asked the reason for the functioning of water softeners. Yet he knows that joints must be tight and that water must never disappear from the fireman's gauge. His office is frequently found in a noisy and untidy room adjoining the boiler plant and too frequently it fails to register the same impression of orderliness and cleanliness that are so conspicuous in his engine room. Usually, he is something of an autocrat but only because necessity requires it.



How much help does the chief engineer need to meet the demands made on him? The answer to this question is to be found in consideration of the size, character and age of the buildings which he must heat, light and keep in repair. In a certain 400-bed hospital in a New England city, the following is the list of salaries of the members of the personnel of the department of heat, light and power:

One chief engineer and foreman of maintenance, \$375 a month and one meal daily.

One assistant engineer, \$200 a month and full maintenance.

One second assistant engineer, \$135 a month and full maintenance (in charge of power house).

Three carpenters, \$120 a month and one meal (extra carpenters when needed are engaged at 80c an hour).

Two painters, \$120 a month and one meal.

One mechanic, \$120 a month and one meal.

One assistant mechanic, \$115 a month and one meal.

One electrician, \$120 a month and one meal.

One handy man, \$65 a month and maintenance.

Three watch engineers and one tramp engineer, \$120 a month and one meal.

Three firemen, \$70 a month and three meals.

Miscellaneous help including:

Eight elevator operators, \$40 a month and maintenance.

One engineer's clerk, \$125 a month and one meal.

Two foremen of cleaners, \$90 a month and one meal.

Nine cleaners, \$65 a month and three meals.

#### *An Economic Asset*

The amount of money required to pay the salaries of the members of the personnel of this department represents the expenditure of about \$36,000 a year. In this institution, the chief engineer feels that he has a staff of sufficient size. Considerable manufacturing is done and all of the repairing of institutional furniture is performed by the hospital carpenters. It will be at once seen that this hospital has adopted the policy of maintaining its own plant in proper repair without the aid of workmen from without. The engineer is a good disciplinarian and is capable of making rounds, of discovering needs for the services of members of his corps and of seeing that such work is properly performed without consulting a busy superintendent. A man of the type who is able to observe maintenance defects, and to correct them without being ordered to do so is of the greatest value to the hospital. In this institution, eight cents of the hospital dollar is

spent for fuel and 16.6 per cent of the total outlay is expended for plant maintenance, including heating and lighting.

One is likely to observe a great variation in the balance sheets of hospitals generally in this latter figure. Such items as are listed here explain the wide range in these cost figures: type of hospital; age of power plant and its efficiency; efficiency of operators; type of equipment; existence of a purchasing or manufacturing policy as to steam and electricity; the kind of fuel employed; the presence or absence of proper economy in such matters as the employment of exhaust steam for heating, the presence of return pumps and lines, the reheating of boiler water, the presence of a water softener and the constant and meticulous attention to the details of maintaining the plant in proper repair.

#### *Sources of Waste*

Some comment will now be made in regard to several of the most important of these items. A hospital plant consisting of a number of detached buildings with the power house at some distance from the hospital proper and thus requiring long steam lines cannot always be economically heated and lighted. It is a well known fact that there is a limit beyond which high and low pressure steam cannot be transmitted effectively. One is frequently surprised to find in an otherwise well conducted hospital basement pipe tunnels filled with steam lines that were left uncovered at the time of their construction or else stripped of their insulation when repairs became necessary.

Dr. Donald J. MacIntosh, medical superintendent, Western Infirmary of Glasgow, Glasgow, Scotland, is the authority for the statement that in 6-inch steam lines, 120 feet long, uncovered pipes will condense 1.39 pounds of steam per lineal foot per hour, with a pressure of 100 pounds and with the temperature of outside air at 62° F. But under the same conditions, with the covered pipe, but .1747 pounds will condense per lineal foot per hour. This authority also states that if, at 100 pounds pressure, 293 pounds of steam per minute pass through such a line, a loss of but 1 pound of pressure at a distance of 120 feet will result. It can be seen that in the course of time much money may be saved by conserving the coal pile at the power house if steam lines are properly insulated throughout their whole length.

Another source of waste is the failure promptly to repair leaks in main or branch steam lines. On a cold winter's day when boilers are being used to capacity, too frequently are pipe tunnels found spouting steam from a dozen leaking joints. Such a condition, coupled with carelessness in replac-



ing insulation when repairs to lines are necessary, represents an inexcusable waste of hospital funds.

The state of repair of the machinery in the power house is of utmost importance from the standpoint of economy. In one institution, it was found that by replacing old generator units, as well as grates and combustion chambers, by installing a CO<sub>2</sub> apparatus, by buying better coal and weighing it carefully, a 50 per cent increase in ward and room cubage and a 500 per cent increase in electricity requirements were made with but a 20 per cent increase in coal expenses. Too few engineers give as much attention to the type of coal purchased as they should. This is particularly true when it is considered that for a very little expenditure, the number of British thermal units that each ton produces and the percentage of chemical ash that remains may be ascertained easily.

A good grade of coal should produce at least 12,500 B.t.u. and should not show more than 14 per cent of chemical ash. With proper coal and an efficient boiler equipment, each pound of fuel should evaporate at least eight times its weight in water. This result cannot be secured, however, with dirty boiler tubes. One of the major extravagances of the power house is the presence of tube scale. In the home, it would be no greater waste if the owner bought and burned the best type of coal, yet neglected to close the outside doors and windows.

#### *The Value of Competent Operators*

Operators who are intrusted with the care of many thousands of dollars worth of moving machinery must be well trained, conscientious and above all attentive to the matter of inspecting and speedily repairing such equipment. An inspection of all moving machinery at the conclusion of each tour of duty, before handing the plant over to the incoming engineer, is of greatest importance. Indeed, many watch engineers refuse to accept the responsibility of a plant until a joint inspection has been made with the retiring engineer. Firemen who allow water to disappear from sight in their glass have no place in the hospital power house. One who does not wet down ashes but allows them to burn grates is almost equally culpable. He who stokes his boiler so hard that coal is wasted is an expensive person indeed. From the inspection of ashes, like the inspection of garbage, much can be learned as to the efficiency of operators and power plants.

Perhaps the majority of hospital power houses do not possess a water softener. As has been intimated, most hospital engineers know but little concerning the principles of inorganic chemistry

operative in the preparation of water before it is turned into boiler tubes. As most superintendents know, water has varying degrees of hardness. This condition is due to the presence of the salts of magnesium and calcium in solution. A number of processes have been found to be effective. These may be classed under those that are of the "lime and soda" type and those that depend on the "salts" process. Water may vary in hardness from 5 to 40 per cent concentration. These chemicals must be precipitated from boiler water because of the certainty that if this is not done a deposit of a rocklike hardness will occur on the inner surfaces of boiler tubes which will serve effectively to insulate heat from the water or the reverse.

#### *What Fuel Shall Be Used?*

The kind of fuel employed as well as the type of stoker used, if any such apparatus is employed, are also important factors. Some institutions instead of burning coal, burn oil. It is a common feeling that little money can be saved by this practice, but there are factors that may alter this deduction. If oil may be purchased for less than four cents a gallon and if from 150 to 200 gallons are equivalent to a ton of coal, the slightly additional original outlay may be somewhat counterbalanced by the saving in personnel or in the cost of removing ashes. This problem, however, is one with so many local considerations that no generally applicable solution can be offered here.

Careful consideration at the time of construction of the hospital should be given not only to the most economical type of installation at the time but also as to its cost of upkeep and the ability of the grade of help procurable to handle properly the type of equipment installed. A combined coal and ash conveyor is dangerous unless emergency equipment is installed, because of the disastrous effect of a breakdown. Apparatus that is too complicated to be understood by the type of engineer the hospital is able to employ is ill placed. Even contractors of reputation have been known to install expensive power house equipment in a faulty manner. In an Eastern institution, an electrical contractor recently installed an expensive turbo-generator in such a way that air for cooling the motor was drawn from a damp steam tunnel. As a result, \$5,000 damage was done because of a short circuit that destroyed the motor.

The engineer should be held strictly accountable for the efficient conduct of those answering to him. The superintendent should support his chief engineer and he should never be guilty of meddling, since meddling is always destructive.

# Editorials

## Is the Hospital a Business?

THROUGH the revolving doors of the nation's palatial hostelrys there flows a continuous stream of men and women who are willing and able to pay well for good food and restful beds. Great fortunes have been amassed by those who have sensed the desires of a never resting public and who have been able to translate them into towering hotels where good service to the travel weary is the first consideration.

Into the management of the country's hostelrys for the sick have crept many of the efficient and salesmanlike practices that characterize the modern hotel. Hospital and hotel lobbies are observed more and more to resemble each other. Businesslike clerks, pert messenger boys with jauntily set caps, courteous elevator girls and efficient starters, and even flower and drug stands meet the eye of the man who seeks either food and rest in the hotel or mental or physical cure in the hospital.

Yet how far apart are many of the motives that activate these two public utilities! The hotel must be made to pay, else disgruntled stockholders will engage new managers; the public hospital never pays dividends that can be expressed in dollars and cents. Here and there, however, may be found an institution for the sick which brings to its owners a real monetary return. More frequently of late are so-called hospitals being constructed by groups of financiers who believe that the care of the sick can be made as profitable as that of the well. Rooms priced from \$20 to \$50 a day is the slogan of some such institutions. Hotels for the sick that are conducted for profit may no doubt exemplify efficiency in business methods to a degree impossible to the community hospital. On the other hand, the care of the sick poor is a burden that prevents profits in dollars. It does, however, present possibilities for a soul nourishing service beside which monetary dividends pale in importance.

Let those who will purchase medical care in *de luxe* hostelrys for the sick, but let not those humbler institutions, whose riches are of the heart only, despair. Theirs is a purpose that is nobler than worldly gains, a destiny that rests on the generous impulses of human hearts and on the sustaining knowledge of service to those upon whom our civilization must still rely for its solidarity.

## Simplification of Supplies Advances One Step Farther

THE sizes of hospital beds and hospital blankets having been standardized, the next logical step seems to be to standardize the size of hospital sheets. There is good hope that this desirable result will follow the recommendation for a 108-inch length for sheets made by the standing committee on simplification of hospital and institutional cotton textiles at its meeting on March 27, reported elsewhere in this issue.

The action taken is significant because of the tendency it exemplifies. It is one of the developments in the simplification project promulgated in June, 1927, through the unanimous vote of the general conference of representatives of manufacturers, distributors and consumers held at the Department of Commerce. This project embraced not only the simplification of sheets but also of pillow cases, draw sheets, bed pads, spreads, bureau scarfs and towels. A general summary of the March 27 conference is being sent to manufacturers, distributors and purchasers of hospital sheets for their acceptance and cooperation and hospitals are hereby urged to give practical support to the committee by endorsing its recommendation as promptly as possible in the interests of economy and efficiency.

The field for simplification and standardization of hospital supplies is broad. Multiplicity of types and variety of dimensions cause unnecessary trouble and expense and elimination of overdiversification should lower replacement costs and improve quality to the benefit of both hospitals and industry.

The chairman of the standing committee is Margaret Rogers, superintendent, St. Luke's Hospital, St. Paul, Minn.

## Care Versus Carelessness

LOOSE stair treads, dark corners, carelessly placed wheel chairs and cleaning utensils, unrepaired doors and windows, faulty sterilizers, poorly manipulated vaporizers and general carelessness have caused innumerable accidents to patients within the hospitals of the United States and Canada. In 90 per cent of the cases the accidents were avoidable and in all cases remedies were sought but not until after the accident had occurred.

When a patient enters a hospital he is correct in assuming that he is to receive the best of care. His mind is usually centered about his own trouble; he feels that he is intrusting his



well-being for days, or perhaps weeks, to the hospital authorities and he has a perfect right to expect that due care shall be taken to see that he is not further injured while he is in an institution that is responsible for making him well. In fact, he is paying for just such treatment.

If the hospital personnel were instructed periodically in the safeguarding of the patient against accidents, it would be of immense benefit to the hospital. In the nurse training school, among the secondary employees, such as maids, orderlies, the kitchen help and the engineering force, and among the office workers, instruction in "safety first" methods and in good housekeeping, would inculcate a régime of care rather than of carelessness. Some hospitals are pursuing this course effectively, and there is no reason why all hospitals, no matter what is the type of patient treated, should not follow these examples. The National Safety Council is now busy preparing a pamphlet on the subject which should be used as a textbook by every hospital in the country.

### Politics and Physicians

**A**LITTLE more than a decade ago a riderless horse walking behind the body of its sleeping master slowly climbed Ludgate Hill in London. And as majestic old St. Paul's was reached, its doors swung open and the body of General William Crawford Gorgas, once a ragged, barefoot boy on the streets of Baltimore, was laid with those of great English heroes of the past.

But the tenor of the official life of this great medical administrator had been in strong contrast to the peace and serenity of this occasion. He had conquered yellow fever in Cuba. He had joined the Atlantic and the Pacific by sheer, dogged persistence in combating the official ignorance and partisanship of his immediate lay superiors.

Not unlike in kind are the experiences of many efficient hospital administrators, of municipal and state institutions particularly. To such, daily, comes the necessity of combating the interference of bungling and often ignorant politically appointed officers, who are superior in rank only.

Where Gorgas was hampered by the superstitious convictions of laymen that yellow fever was generated by mud and filth, the present day executive is often required to measure his acts by their effect on the fortunes or popularity of a person or party temporarily in power. Cheap publicity as to the excellence of a service known to be inferior, a maudlin display of spurious sympathy for the suffering of the poor, a lowering of professional qualification of members of the hos-

pital personnel for friends of the politically elect, all are soul callousing experiences for the ethical superintendent of the state or municipal hospital. And perhaps saddest of all is the sight of an erstwhile high type physician stultifying himself by condoning such procedures.

Gorgas became a world benefactor because he never yielded in his fight against the deadening and destructive effect of ignorant and selfish political interference. He will be remembered for his great and valorous scientific deeds when the names of his critics have been buried in oblivion.

### Hospitals for Profit—Are They a Public Asset?

**N**OT only the hospital world, but the medical profession and the general public need to face seriously the problem of the proprietary hospital. The facts regarding the distribution of these hospitals in the United States and some of the conditions affecting this type of institution are set forth in an article in this issue.

It appears that there are no less than 2,600 hospitals in the United States that are established for profit, constituting 35 per cent of all the hospitals in the United States. Most of them, however, are small institutions so that altogether they have only some eighty thousand beds, less than 9 per cent of the total bed capacity in this country. It is evident that physicians in many small communities have had to start hospitals at their own risk as business ventures, because the community has been unwilling or unable to provide what is now recognized by thoughtful people as a local need, as essential as schools or parks. The struggles of some of these physicians to maintain their hospitals in the face of financial and administrative difficulties are pathetic, but the results for the community may be pathetic also. Experience has shown that these small proprietary hospitals are rarely satisfactory either to their physician-owners or to the public. The physician necessarily bears the professional responsibility for hospital service. To place the financial responsibility also upon him is neither fair nor on a large scale practicable.

Little is to be said in favor of the considerable group of proprietary hospitals established in cities, in competition with nonprofit institutions. There is preponderant evidence of unsatisfactory standards, despite occasional, distinctive high grade institutions, which, however, are exceptions to an unfortunately prevailing rule.

It is pointed out that the increasing amount of capital needed to establish hospitals and the



growing expense of maintenance render it unlikely that proprietary hospitals will extend largely in the future. But the hospital and medical world should not rest in the lap of an easy optimism. Individuals who want to establish hospitals as a means of livelihood have a legal right to do so, but the right of the public to disinterested hospital service of a high grade is paramount to the rights of any individual. Increased attention should be given by medical and hospital organizations and by public authorities to the supervision and regulation of proprietary institutions.

### International Consideration to Be Given to Mental Hygiene

**T**HAT we are becoming internationally minded seems to be indicated by an increasing number of international meetings—hospital, health, welfare and educational.

Apart from their value in specific spheres of work, such meetings have important potentialities in a wider sense. If races intermingle, if the inhabitants of different countries become better acquainted, if they learn to view problems from various standpoints instead of from one only as they are too prone to do, minor antagonisms which so often lead to international ill feeling, with disastrous results, will be less likely to arise. It may be that world peace can be more nearly achieved by such indirect and apparently simple methods than by all the pomp and panoply of state parleys.

The first international congress on mental hygiene, to be held in Washington, May 5 to 10, will be welcomed by all because of the increasing significance of mental hygiene in all health programs. Dr. Frankwood Williams, medical director of the National Committee for Mental Hygiene, heads the advisory committee on programs, which has on it representatives from more than thirty countries and eleven allied groups. Practically all aspects of mental hygiene will be covered at the congress. It is the purpose to have a maximum of discussion and a minimum of formal paper reading. To this end papers, printed in full in various languages in advance of the meetings, will be limited to ten minute statements and discussion will follow. Some subjects to be discussed are: organization of the mental hospital and its rôle in community life; psychopathic hospitals and psychopathic wards in general hospitals; organization of special types of clinical service, as in courts of justice, outpatient departments of hospitals; types of personnel required in mental hygiene work.

### Quality or Quantity?

**S**TANDARDIZATION is a term that is prone to ruffle the dispositions of otherwise placid persons. To some there is contained therein a suggestion of mandation—a concealed, yet nevertheless a very real, gesture at restraint of the voluntary action of the individual. The Committee on the Grading of Nursing Schools, which for many months has been attempting to learn the faults and the excellencies of the country's schools for nurses, must have experienced something of this attitude on the part of hospital boards, here and there. It must have become more than ever convinced that there is a disturbing variance in the methods and efficiency of instruction employed in nursing schools throughout the country.

The end product—the graduate nurse—is in no way possessed of standard qualities of efficiency and skill. A nurse's cap, and a cryptic R.N., guarantee that their possessor has spent two or three years within the walls of some institution locally known as a hospital. They signify little more. To be sure, the staff of such a hospital has consisted of a number of physicians and nurses, usually conscientious, sometimes moderately competent, less often, both scientifically efficient and educationally alert.

That all such schools for nurses have a right to exist is yet to be proved. That many are, in greater or lesser degree, educationally incompetent seems certain. None can dispute the need for the elevation of nursing standards. Moreover a high quality of nursing service is much more to be desired than an unlimited quantity of capped and gowned women purporting to possess the scientific and personal attributes necessary to the true nurse.

If the grading of nursing schools will provide better and more effective nursing for the present and future sick of this land, none will applaud more sincerely than the hospital managers and executives. If a limitation of output will improve the quality thereof, let the educationally inefficient school cease to exist. To provide better, even though fewer, nurses will possibly result in as great an alleviation of human suffering, as would be the case were mere numbers of graduates the aim sought. On with the grading of nursing schools, we say, because *THE MODERN HOSPITAL* believes that humanity will be benefited thereby. The financial or social safety of the members of this professional class must remain but an incident, a by-product, in the battle for better health conditions for the masses of the people.

## YOUR EVERYDAY PROBLEMS

*A department devoted to the informal discussion of problems arising in the everyday life of the hospital superintendent.*

[No attempt has been made to offer final conclusions relative to the questions considered in this department. THE MODERN HOSPITAL will gladly welcome further comment by its readers on any of these problems or the presentation of other queries for discussion in later issues.—Editor.]

### What Is the Best Way to Secure an Efficient Visé of Clinical Charts?

No more difficult and at the same time no more basically important problem presents itself daily to the executive of the hospital than that concerned with the proper completion of clinical charts before the patient is discharged. Not only is the scientific work of the hospital accurately reflected by the type of record it keeps, but from an educational standpoint it is essential for interns to be required frequently to set down their observations concerning the progress of the patient.

There are several general systems in vogue in the hospitals of this country. These have as their aim the efficient supervision of the building of clinical charts. In some institutions a younger member of the staff is appointed with the title of "registrar" to visé the charts of all patients before these documents are sent to the filing room. The fault of this system usually lies in the fact that the patient has already left the hospital before chart inadequacies are discovered. Such a system therefore is basically unsound. This is true because it is the experience of administrators that facts that are but a matter of memory on the part of the intern are too inaccurate and too incomplete to be dignified by the term of "clinical record." It is regrettable that too often when an intern's attention is called to an incomplete chart, he sets down statements he believes true on general principles but which are not the result of a careful examination on his part. This system need only be mentioned to be condemned, unless the duties of the registrar extend into the wards and contemplate a frequent inspection of the chart in the making. In some hospitals this is the case.

In most institutions there appears in the book of rules a notation to the effect that the members of the visiting staff are responsible for the accuracy and completeness of all clinical records. In theory, such a rule would appear workable. In practice, it is almost impossible to secure from a visiting physician or surgeon or even from the members of their assistant or associate staffs a sufficient grade of supervision to ensure the accuracy of records. Indeed, when the chief is required to sign the chart of each patient who is discharged from his service this becomes largely a routine matter and not one that guarantees in any way that the facts set down on the chart are correct, or even that the observations it contains are the result of a careful and frequent inspection of the patient by the intern.

In other institutions the viséing of clinical charts rests

upon some record room officer. This is particularly true in certain church institutions when the person to whom this duty is assigned is one whose long years of experience give assurance that she will do the work efficiently. But the fault that is readily observed in this system is that young physicians resent the critical attitude that must exist if a record room clerk is to perform this work properly. Perhaps the best and most workable scheme that has been devised is one that requires a resident physician daily to inspect the charts of all patients in the wards under his supervision. Such a plan makes it possible to enforce the laudable rule that the history and the results of the physical examination of each patient must be properly inscribed on the records within twenty-four hours after admission, that daily notes must be set down and that the record and full description of all operations performed must be on the chart on the day succeeding surgical treatment. If the charts of all patients who are discharged, transferred or who have died are presented to a resident physician for approval and signature, it should be possible to prevent any patient from leaving the institution until his records are complete.

It would seem, therefore, that the most efficient procedure to adopt would be to place the responsibility for the completeness and accuracy of all charts upon resident hospital officers rather than to expect the visiting chief and his assistants to carry out this work. In some hospitals in which control over the visiting staff makes it possible for the responsibility for this work to be placed there, an ideal system may be evolved.

Nor should the supervision of clinical charts extend to ward patients only. It is regrettable that so little aid is usually secured from visiting physicians in making the records of private patients comparable in completeness to those coming from the public wards. The hospital has the same right to require that the records of private tonsillectomy cases, for example, be just as complete, accurate and as promptly written as those of the free patient in the ward.

### Who Is Responsible for the Handling of Hospital Quarantines?

The answer to this question will lie largely in the specific organization of the hospital affected. In some institutions, a dermatologist is found as a member of the visiting staff. In such hospitals there is usually included in the book of rules a statement covering the duties of this physician. These usually cover the diagnosis of intrahospital contagious conditions. Sometimes the responsibility for a proper quarantining of wards and rooms rests upon this officer.

If the superintendent of the hospital is a medically trained man and if he has kept in touch with modern methods in the diagnosis and treatment of contagious diseases, the service of the dermatologist is not as neces-



sary as in an institution where the superintendent is a layman. In most communities, board of health regulations require the same supervision of contagious diseases in institutions as in homes. The presence of a patient who is suspected of suffering with such a disease is reported to the board of health whose duty it is to send a diagnostician to confirm or controvert the diagnosis. At times, the practical application of quarantine rules is left to this officer. At others, a resident medical officer promptly takes steps to protect others from the danger of contagion.

Whatever scheme is followed, it becomes immediately evident that no time must be lost in declaring a room or ward, in which there is probably a contagious disease, in quarantine, and this duty should fall upon some physician whose services are immediately available. To be required to await on Sunday or a holiday the arrival of a staff member before any action can be taken is to favor the extension of the contagion if its presence is confirmed.

While the ultimate decision as to the diagnosis, or perhaps even the disposal of an institutional contagious disease, rests with the local board of health and while valuable assistance may be secured from a member of the visiting staff, yet there should be resident medical ability and service at hand to assure prompt protective steps. The ideal situation consists of a resident medical officer of sufficient age and experience who will not only make the diagnosis of a contagious state and look later to a board of health for a routine confirmation, but who will be empowered with the authority immediately to inaugurate an effective quarantine.

### Should the Board Dismiss Staff Members When It Considers Such Action Advisable?

In many instances a disturbing and disagreeable situation has arisen in which boards of trustees have felt it wise to dispense with the services of a member of the visiting staff and yet have hesitated for reasons of policy or doubt as to their power. Indeed, in a few cases a physician thus dismissed has appealed to the courts for justice, claiming that much damage has been done to his reputation and income and that a dereliction of duty on his part has only been suspected and has not been proved.

Because of a fear of the development of such an impasse, hospital boards have been inclined to procrastinate in bringing an erring or incapable physician before them for reprimand or dismissal. It is true that in a majority of such situations, it is almost impossible to secure definite proof. Such acts and traits as the splitting of fees, the reference of dispensary patients to private offices, immoral practices in rare instances and scientific incompetence in others represent some of the offenses for which physicians have been dismissed.

Since the board of trustees requires no signed contract on the part of the physician and since such officers are usually elected for not more than one year, it would appear that the governing board should take action when it feels that the patients for whom it is responsible are not being properly treated or that the hospital is suffering in reputation because of the presence of an objectionable physician on its staff. If the year of appointment is almost terminated, it might be an act of wisdom for the physician to fail of reappointment at that time. If, however, the offense is of sufficient gravity and if the appointment of the staff member has some months to run, it would seem that it is the duty of the board to

summon the offending physician and frankly state its reasons for the action to be taken.

It is to be regretted that staff members have been known to join hands in an effort to force the continuance of one of their colleagues upon an institutional board. Such an action on the part of physicians generally smacks of trade unionism and a courageous board of trustees will have no dealings with a group of this complexion. It would appear that the board of trustees has a right to dismiss a physician, the character of whose service renders him a liability rather than an asset to the hospital.

### Where Should the Books of the Hospital Be Kept?

In some institutions it is the wish of the treasurer that the books of the hospital be kept at some point apart from the institution. As a result of this practice the superintendent is continually informed incompletely as to the financial situation of the hospital and is more or less inconvenienced by being required to make a visit to the treasurer's office at some distance from the hospital to secure this information.

It appears that such a practice and policy are unwise. The bookkeeper at the hospital should have more than a temporary set of books in which to record the daily receipts and expenditures of the institution. The superintendent can be of service to the treasurer by aiding him in keeping an account of expenditures, receipts, mortgages and other capital fund accounts. The treasurer of the hospital should recognize the fact that all records pertaining to the conduct of the institution should be kept there, and that it is inefficient as well as humiliating to the superintendent to be required to refer inquiries relative to the financial status of the hospital to an office outside the institution.

It may be said, therefore, that THE MODERN HOSPITAL does not advise under ordinary circumstances the placing of the financial records of the hospital in the treasurer's office outside the institution. It should be arranged for the treasurer to come to the hospital if it is necessary for him to make personal entries in these records. Better even than this would be the presence of a bookkeeper of sufficient trustworthiness so that a busy treasurer, in order to secure satisfactory and informative data, would only be required to request from the superintendent a financial statement concerning matters in which he is interested.

### What Shall Be Done With the One Man Hospital?

In an institution in the Midwest the following situation is found. A physician who for many years has been honored with the position of chief of staff has come to consider himself in authority relative not only to medical matters but also to the physical conduct of the hospital. The board of trustees is an inactive and purely nominal group. Its policies are directed by this physician and it acquiesces without question to any demand made upon it from this source. The superintendent of the hospital (there have been many superintendents in the past decade) is relegated to the position of matron and has no authority whatsoever. The scientific and financial development of the hospital has been hindered by existing conditions, and as the chief of staff grows older and more inflexible the future of the hospital is more and more in doubt.



This situation or some application of it is not uncommon in the hospitals of this country. As a result scientific progress stagnates, morale deteriorates and the hospital is forced to change executives at frequent intervals. It is difficult to give any advice that will be generally applicable. When a board of trustees is so little interested in the welfare of a hospital and has so little force of character as to allow any person, no matter how strong, to usurp power that belongs to it, few remedies except the hand of time itself are effective.

In the above situation it would appear that it is the duty of the community to demand a reorganization of the hospital—to require that a board which has become fossilized be either rejuvenated or replaced. It is suggested that the self-appointed supersuperintendent be either made a superintendent in fact, if he be capable, or relegated to the staff position from which he arose. No business man would permit such a situation to exist and it is only because the hospital has been looked upon as a curious cross between a philanthropy and a business that such things are permitted. There is no better arrangement known to us to-day by which to conduct the affairs of a hospital, no matter whether it be large or small, than a strong and interested board of trustees working with a trained and efficient superintendent.

### Should the Superintendent Live in the Hospital?

This question has arisen in an Eastern institution of 125 beds. In this hospital the superintendent and his wife—there are no children—have been assigned living quarters on a floor, the remainder of which is devoted to the care of private patients. The board of trustees of the hospital, however, desires the use of the superintendent's suite for semiprivate rooms and feels that it is not right for a portion of a private floor to be used for living purposes.

It may be said without equivocation, that the hospital owes to its superintendent adequate and suitable living quarters. It is fair neither to the hospital nor to the executive to provide him with makeshift arrangements. To be sure, when an institution is engaged in building operations it may be necessary to improvise living quarters for various members of the hospital's personnel.

While there is something to be said as to the wisdom of always having the superintendent near at hand to give directions in case of an emergency, yet it has been the experience of many large institutions that the superintendent may safely live at some distance from the hospital. In most institutions that possess an intern staff, the younger physicians being supervised by a doctor older in experience and years, the medical conduct of the hospital is in safe hands from the hour the superintendent leaves in the evening until he arrives in the morning. Moreover, modern telephonic communication is so prompt and satisfactory that instructions may be secured almost as speedily as if the executive officer actually dwelt in the hospital.

Certainly it is not proper for the wife of an executive to be required to pass through the corridors used by patients and their relatives. It would be far more wise, it would seem, for the trustees in this institution to offer an adequate salary to their executive and to allow him to live outside the hospital. This plan has been found practicable by many institutions, and it is decidedly advantageous to the superintendent himself. There is no more fatal administrative disease than that represented by too long dwelling in an atmosphere of sickness, which re-

sults in the administrator's becoming grooved and inflexible in the methods he employs in conducting an institution for the treatment of the sick.

THE MODERN HOSPITAL would advise the inquiring board member to make a fair salary adjustment and to permit the institutional director to provide for himself and family outside the hospital grounds.

### How Can the Morale of Functions Conducted by Training Schools Be Kept High?

It is the custom in most hospitals for a dance to be conducted once or twice during the year by the school for nurses. To this function are invited, either by the nurses themselves or by the authorities of the school, persons from without the hospital family. These occasions are usually chaperoned by one or more members of the training school staff. The superintendent of nurses asking the above question has had difficulty in controlling the conduct of the young men particularly who come to these parties.

It can be said without hesitation that the general tone of such entertainments should be kept high. The consuming of liquor in any degree before or during these social functions should be absolutely forbidden. To some the mere odor of alcohol on the breath of any of the participants is sufficient to request that he or she withdraw from the floor. In others, there is a tendency to show leniency in this matter. The appearance of young men and women standing around the doors and even within the home itself smoking cigarettes is most objectionable. Proper dancing and the avoidance of all of those behavioristic traits of a cheap dance hall in a jazz age should be required.

It is a good training for young women to be required to conduct such functions with the utmost decorum, gracefully dispensing a nice hospitality such as they would expect to show in their own homes. It would be far better both for the hospital and the nurses themselves to be granted no opportunities for social entertainment than to have any departure from a dignified behavior on the very highest of moral tones. Most hospital executives will condone in no way any behavior which will reflect unfavorably upon the hospital or its school for nurses.

### Should the Superintendent Attend Board Meetings?

In the hospital from which this question came, the superintendent is of the opinion that unwise decisions are reached at the meetings of the board of trustees that might be averted could he have been present to furnish certain essential facts. He is also under the impression that his presence at board meetings would serve to elevate the morale of the hospital's personnel since it would demonstrate to all that he enjoys the confidence of his board and that it values his advice relative to hospital matters.

In some hospitals there is a contention on the part of members of the visiting staff that the medical group should be represented at trustee meetings. It is contended that if the superintendent of the hospital is in attendance at such meetings, a staff member should also be present. The answer to this question may be secured by inspecting the chart of organization which should hang on the wall of every hospital office.

The superintendent of the hospital is the resident representative of the board of trustees. He is responsible for both the physical and medical angles of the hospital's

work. The medical staff answers to and through him to the board of directors. There should be no feeling that any competition exists between the executive and the medical staff as to the prior right of representation at the stated meetings of hospital directors. The superintendent represents the staff as well as all other members of the hospital's personnel at these conferences. In many institutions, the superintendent is the secretary of the board of trustees. In this capacity he is fully informed concerning the development and adoption of all policies affecting the hospital. He is in possession of all facts concerning the hospital's financial status and is able to present each month for each member's information a full report of both the scientific and financial functioning of the institution.

It is a decided mistake for the board of trustees to exclude the superintendent of the hospital from its meetings. If matters are to be discussed concerning which it does not appear desirable for the executive to be informed, it should be possible without any injury to his feelings to ask this official to step from the room during such discussion. On the other hand, it may be said that there should be no matters affecting the hospital concerning which the superintendent should not be fully acquainted. It is an injustice both to him and to his position to deliver to him orders for execution of which he has hitherto had no knowledge. When such an impasse arises, it is far more wise to seek a new superintendent or else to remove the distrustful board members from their official hospital positions.

### How Can the Fly Menace Be Best Handled?

Flies find no justifiable place in the wards and rooms of a well conducted hospital. From June to October the alert superintendent is continually on his guard to prevent any immediate or even remote contact between flies and the patient. Such executives know full well the deadly possibilities which exist not only from the standpoint of the possible infection of wounds but also from that of the contamination of the hospital's food.

That there should be in the neighborhood of the institution no breeding place for flies, is of the first importance. Fortunately, the motorization of the hospital ambulance service has removed the stable as a source of danger to hospital dwellers. Yet some institutions keep one or more horses. Adjacent to many hospitals active fly breeding foci are still found in the form of uncovered manure pits and unclean outbuildings.

To prevent the difficulty by striking at its source, therefore, is to eliminate all such breeding places. Manure pits should have cement bases so that the larvae cannot enter the soil for their necessary development. The garbage pit is another common breeding place. Yet perhaps this serves less as a breeding place than as one that attracts flies from other areas. Here the utmost in cleanliness is necessary. Garbage cans should be sterilized with live steam after having been washed with hot water. The absence of properly fitting covers to garbage containers is a fault to be observed in many institutions. The proper screening of hospital wards and rooms is, of course, necessary. Improperly fitting screen doors, particularly those through which food trucks must be pushed, are a source of much annoyance to all executives. It is of little importance to the hospital patient if many flies are to be found within the institution. He is largely concerned with methods of preventing their entrance into his ward or room. The ordinary fly trap, which is cheap

but efficient, should be of great use in this campaign. Window sill shelves and stands just outside doors are effective places for these traps. The pests are entrapped before they enter the hospital. Bread and milk have been found to be an excellent bait. Flies that have entered may be killed by frequent spraying with some insecticide solution. When kitchens and dining rooms become badly infested, the use of a spray or powder at night after the room has been tightly closed is effective.

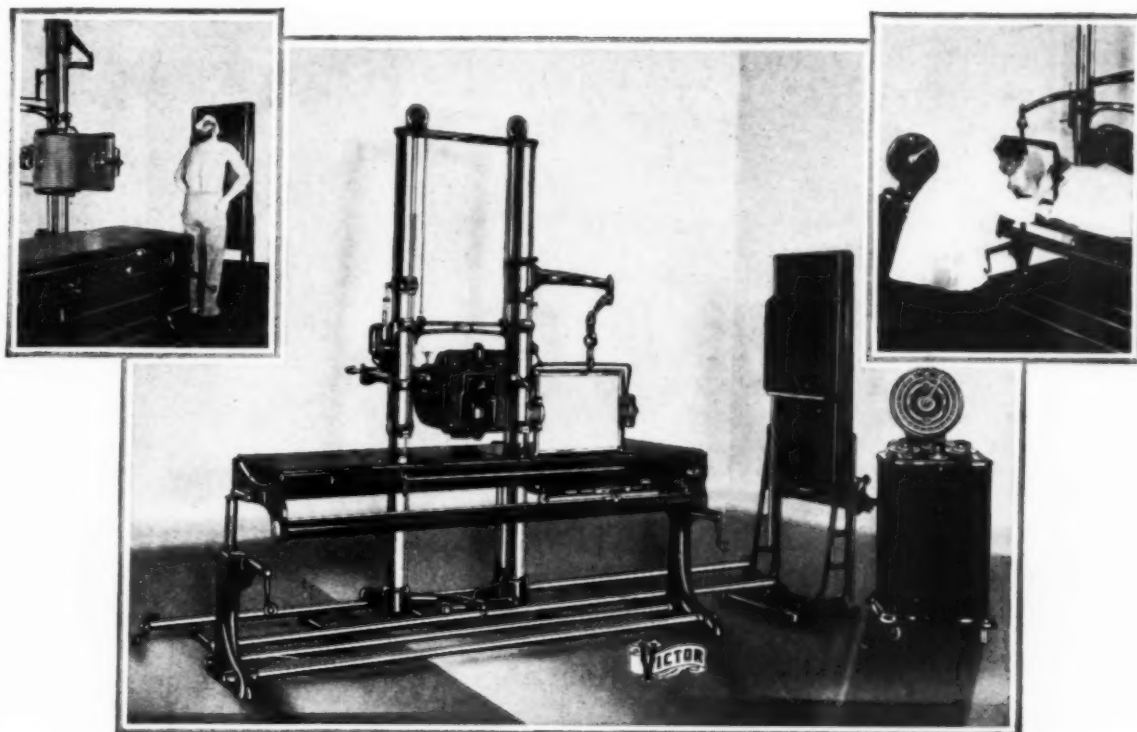
Fly eradication to be successful must concern itself with the adoption of all of the foregoing suggested plans. Of equal importance is the education of the hospital's personnel so that no excuse can or will be offered for the presence of these insects in the hospital.

### What Should the Directress of Nurses Do When Her Students Accept Invitations From Nonmedical Employees?

This is a question which has been asked THE MODERN HOSPITAL by the directress of an Eastern institution. It is one which has presented itself in varying phases to many directresses of nurses on numerous occasions. Sometimes student nurses receive social invitations from former hospital patients and even from hospital employees as a result of an acquaintance formed in the course of their professional duties. Not a few are tempted to accept such invitations and later, as a result of so doing, find themselves in most embarrassing situations. Sometimes former hospital patients who are married successfully endeavor to continue acquaintanceships with student nurses after leaving the hospital. Too often, one hears of student nurses accepting invitations from members of the non-medical personnel.

When the directress of a training school is informed concerning this state of affairs, she has but one course to follow. This consists in sending for the nurse concerned, and in frankly discussing with her the difference between professional and social contacts. It certainly is far beneath the dignity of a professional woman to have any social relations with orderlies or technicians. It just as certainly is professionally and ethically wrong for her to accept invitations from married former patients. There can be no midway course in this matter. To be sure, unthinking young nurses often feel complimented by any attention from patients who have attained social or financial prominence in the community. Herein lies a great danger to the nursing profession as a whole, as well as to the individual. The directress of nurses owes it to herself and to the hospital not to countenance any dereliction from the straight line of duty in this regard. Her course of action should vary little from that affecting the student nurse when a graduate nurse offends by accepting invitations from married physicians on the visiting staff. That a graduate nurse should accept presents or invitations from married patients, is unthinkable.

As a direct answer to this question, it can and should be said that the offending persons should be first warned and then suspended from service in the hospital. If for any reason such an action on the part of the directress of nurses is not supported by the superintendent of the institution and its board of trustees, she should, even at a financial loss to herself, refuse to be longer connected with such a hospital. THE MODERN HOSPITAL commends the brave behavior of many hospital and training school executives in matters concerning moral right and wrong and regrets that too few boards of trustees have the vision to applaud them for the stand they take.



## The Victor Shock Proof Oil Immersed X-Ray Unit is Compact to a New Degree

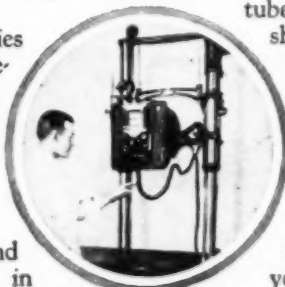
THE compactness of the Victor Shock Proof X-Ray Unit is a feature that will appeal to many who have to contend with the problem of limited space.

The complete Victor unit occupies a space not much larger than is required for an x-ray table. Now it becomes possible to render a complete diagnostic service... vertical, horizontal and angular radiography, fluoroscopy and orthodiagraphy... in one room.

This feature of completeness and compactness is one of many ways in which this latest Victor unit represents an advance over anything in the entire field.

It is a feature second in importance only to the SAFETY of this new unit. By sealing the x-ray tube and the high tension transformer in one single tube head, insulated in oil, all danger of shock is eliminated. For there is no high tension current developed except inside this container! The result is a 100% electrically safe x-ray unit.

No development in the field of roentgenology since the Coolidge tube has attracted so much favorable comment as has this Victor Shock Proof X-Ray Unit. Wouldn't you like the complete facts about it? We have published them in an attractive illustrated booklet, a copy of which we will mail on request.



The only electrical connection to the apparatus proper is this insulated cable which brings the low voltage line current to the transformer in the tube head, much the same as a cable is used to conduct current to other electrically operated equipment in the office or laboratory.

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## NEWS OF THE MONTH

# April Is a Popular Month for Hospital Meetings

**A**PRIL is proving to be a popular month for hospital meetings. Five associations held their regular annual meetings last month: Kentucky on April 14 and 15, Alabama on April 16, Louisiana on April 22, Mid-West on April 25 and 26 and Ohio on April 29 and 30.

Nearly a hundred delegates were registered at the second annual meeting of the Kentucky Hospital Association in Louisville.

Dr. John R. Wathen, first vice-president, presided at the first session. Following the invocation an address of welcome was delivered by Dr. C. H. Harris, director of health, Louisville. This was followed by a short talk given by Dr. John Walker Moore, dean of the University of Louisville Medical School, who told of the work of the medical school and of the ambition of the school to pattern a medical center in Louisville after those in other cities, bringing to the medical school two of the outstanding hospitals in Louisville.

### A. H. A. President Speaks

Dr. Christopher G. Parnall, president, American Hospital Association, delivered the first address, in which he discussed the present cost of hospital care and the possibilities of state medicine and its effect upon hospitals generally. This was followed by an address delivered by Dr. Lillian South of the state board of health. Doctor South outlined the work that was being done in the training of laboratory technicians in the state department and assured the hospitals of Kentucky full cooperation at all times. The last paper was given by Joseph M. Lee, a Louisville lawyer, who told of the progress that was being made and the work that was still to be done in changing the workmen's compensation laws in Kentucky. The law at the present time is most unfair, according to Mr. Lee, and both the medical profession and the hospitals have combined to seek changes. Mr. Lee's paper was discussed by Dr. Frank P. Strickler of Louisville.

Dr. R. C. McChord, of Lebanon, presided at the afternoon session, and the first address was given by Dr. Bert W. Caldwell, executive secretary, American Hospital Association. This was followed by an interesting presentation given by Carol Martin, superintendent, Community Hospital, Glasgow, of the work of the hospital. The Community Hospital is a Commonwealth Fund hospital and has been open for a year. She recited many of the interesting experiences she was having with the hill people, who were totally unfamiliar with hospitals up until a year ago. John A. McNamara, executive editor, THE MODERN HOSPITAL, was the next speaker. He outlined a scheme for public relations and research for the hospitals. The last address was given by Dr. Malcolm T. MacEach-

ern, director of hospital activities, American College of Surgeons, who conducted a round table.

In the evening an enjoyable banquet was held at which time Marian Williamson, executive secretary, Kentucky Crippled Children's Commission, told of the statewide program that was in effect. Short addresses were given by Dr. G. A. Hendon of Louisville, Dr. Malcolm T. MacEachern and Dr. Christopher G. Parnall. The speaker of the evening was Dr. Irvin Abell, Louisville, who traced the history of hospitals and nursing from their beginning down to the present time. His address was most scholarly and well presented.

At the Tuesday morning session the first speaker was Matthew O. Foley, editor, *Hospital Management*, who spoke on National Hospital Day. This was followed by an excellent address given by Rabbi Joseph Rausch, Louisville. Rabbi Rausch's speech was discussed by two other trustees. A paper was then read by Dr. S. C. Frankel outlining the work that was being done by the joint hospital committee which is composed of Louisville physicians.

On Tuesday afternoon Sister Theona, superintendent of nurses, St. Anthony's Hospital, spoke on the student nurse in the hospital, and Miss Quigley Austin, dietitian, Kentucky Baptist Hospital, discussed dietetics in a private hospital.

Dr. John R. Wathen was elected president, Agnes O'Roke secretary, Miss Lake Johnson trustee, and Major Charles A. Trew, superintendent, Booth Memorial Hospital, Covington, trustee.

### Louisiana Association Meets in New Orleans

At the meeting of the Louisiana Hospital Association Louis J. Bristow, superintendent, Southern Baptist Hospital, New Orleans, presided, and also pronounced invocation.

The first speaker on the program was Dr. George S. Bel, who is chairman of the board of Charity Hospital, New Orleans. He welcomed the delegates and took occasion to outline the interesting history of Charity Hospital, the hospital in which the meeting was held. He paid tribute to several of the Sisters who had been connected with the institution for many years.

The second address was by John A. McNamara, executive editor, THE MODERN HOSPITAL, who spoke on labor turnover, the training of interns, and the development of public relations by hospital superintendents. He was followed by Dr. Bert W. Caldwell, executive secretary, American Hospital Association, who reviewed the work that hospitals have been doing in Louisiana.

An interesting paper was presented by Janet M.

# Typhoid Fever Is Preventable

Immunization of millions of soldiers against typhoid during the World War proved that the use of typhoid vaccine is a safe, simple, and effective measure. Its use should be extended to protect those who may be exposed to infected water, milk, or food.

## Typhoid Mixed Vaccine

### LILLY

SPECIFY THROUGH YOUR DRUGGIST

**V 760** Three 1 cc. vials for complete immunization of one patient.

*Larger packages are available for group immunization.*



FOR PAMPHLET CONTAINING INFORMATION OF IMMUNIZATION AGAINST TYPHOID FEVER WRITE

**Eli Lilly and Company, Indianapolis, U·S·A**

## News of the Month

Geister, executive secretary, American Nurses Association, who took as her topic "Nursing Mr. Middleman." Miss Geister emphasized the fact that at the present time there were too many nurse graduates and too many training schools, and said that the problem that confronted the hospitals was the need for fewer nurses rather than more nurses, and for better training rather than quicker training.

Two viewpoints on workmen's compensation were presented, one from the hospital's viewpoint given by Dr. H. W. Knight, superintendent, Flint Goodrich Hospital, New Orleans, and the other from the doctor's viewpoint, by Dr. Denegre Martin, Touro Infirmary, New Orleans. At the present time the Louisiana law allows but \$250 as a maximum for all compensation cases, this amount to include the payments to doctors, the nurses and to the hospital.

A word of greeting was given to the delegates by Dr. Christopher G. Parnall, president of the American Hospital Association, who outlined the plans for the national meeting that is to be held in New Orleans in October.

An excellent lunch was provided those attending the meeting through the courtesy of Dr. Arthur Vidrine, superintendent, Charity Hospital.

In the afternoon a round table was enjoyed, followed by a business meeting, at which time the following officers were elected: president, Dr. E. L. Sanderson, superintendent, Charity Hospital, Shreveport; vice-president, Dr. W. C. Rucker, U. S. Marine Hospital No. 14, New Orleans; secretary-treasurer, Dr. Arthur Vidrine. It was decided to hold the next meeting in Baton Rouge in April, 1931.

Louis J. Bristow in his presidential report outlined the total number of beds in the state, touched on the cost of hospitalization, urged the people of New Orleans to observe National Hospital Day, discussed legislative matters, and talked of the campaign now on for a new Negro hospital in New Orleans. He recommended the appointment of a strong legislative committee, and recommended that the association give endorsement to the fund raising campaign for the new Negro hospital.

### Mid-West Meeting Well Attended

There was a registration close to 150 hospital people at the Mid-West Hospital Association meeting held at the Mayo Hotel, Tulsa, Okla., April 25 and 26. Dr. Fred S. Clinton, Tulsa, Okla., president of the association, presided, and at the morning session following invocation, which was given by Rev. C. M. Reves, greetings from Tulsa were presented by the mayor-elect. This was followed by responses from the president of the Oklahoma Hospital Association, Dr. Frank H. McGregor, Border Hospital, Manjunt, and by Dr. T. R. Heath, superintendent, Bethany Methodist Hospital, Kansas City, representing the Kansas Hospital Association.

Secretary Walter J. Grolton, Missouri Pacific Hospital, St. Louis, read the minutes of the last meeting, and a roll call of the various states present was then taken. Delegates from Texas and Arkansas were also present as well as those from the three states making up the Mid-West Association.

The afternoon session was in charge of Dr. Heath, and the first speaker was Matthew O. Foley, editor, *Hospital Management*, who talked on National Hospital Day. Reports from the state chairmen for this occasion were then presented.

An excellent discussion was presented on "Fire and Related Life Hazards in Hospitals," by J. W. Kent, Missouri State Inspection Bureau, St. Louis.

Dr. Bert W. Caldwell, executive secretary, American Hospital Association, led the general discussion of the afternoon's program.

An enjoyable banquet and round table were held in the evening at which Doctor Clinton presided. One of the features of the program was the presidential address delivered by Doctor Clinton. This was followed by a musical program which was exceptionally good and was supplied in connection with the Tulsa Civic Opera movement which was holding a musical week in Tulsa. The round table program conducted by Dr. Malcolm T. MacEachern, associate director, American College of Surgeons, proved so interesting that it lasted for more than an hour. This ended the evening's entertainment.

On Saturday morning the first speaker on the program was John A. McNamara, executive editor, *THE MODERN HOSPITAL*, who discussed the annual report and other problems in the hospital.

This was followed by an excellent paper given by T. J. McGinty, superintendent, Oklahoma Baptist Hospital, Muskogee, entitled "Selling the Community on the Hospital Idea."

The last paper of the morning was given by E. Muriel Anscombe, superintendent, Jewish Hospital, St. Louis, and was entitled "The Convalescent Patient."

At the afternoon program Ray Kneiff, secretary, Catholic Hospital Association, discussed annual reports, and Charles M. Brown, St. Louis, told his impressions of the meeting.

Following the business session, the meeting adjourned.

### Work on Kansas City Hospital Begun

Work on the new \$1,000,000 Jewish Hospital, Kansas City, Mo., was begun recently, and it is expected that the building will be finished within a year.

The normal capacity of the hospital will be 129 beds, but the facilities can be increased to 150.

The building will be of modernistic design. The main entrance will face the northwest, with concrete driveways leading in both directions. A small park in front will be landscaped.

The offices, lobby, reception rooms, interns' living quarters, the ambulance entrance, emergency operating room and the children's section will all be on the first floor. On the second floor will be the operating rooms, x-ray rooms and laboratory equipment. The fourth and fifth floors will be devoted to private rooms. The maternity department will be on the sixth floor.

Soundproof partitions will be used throughout the building, and the corridors will have terrazzo and rubber tiled floors.



, No. 5

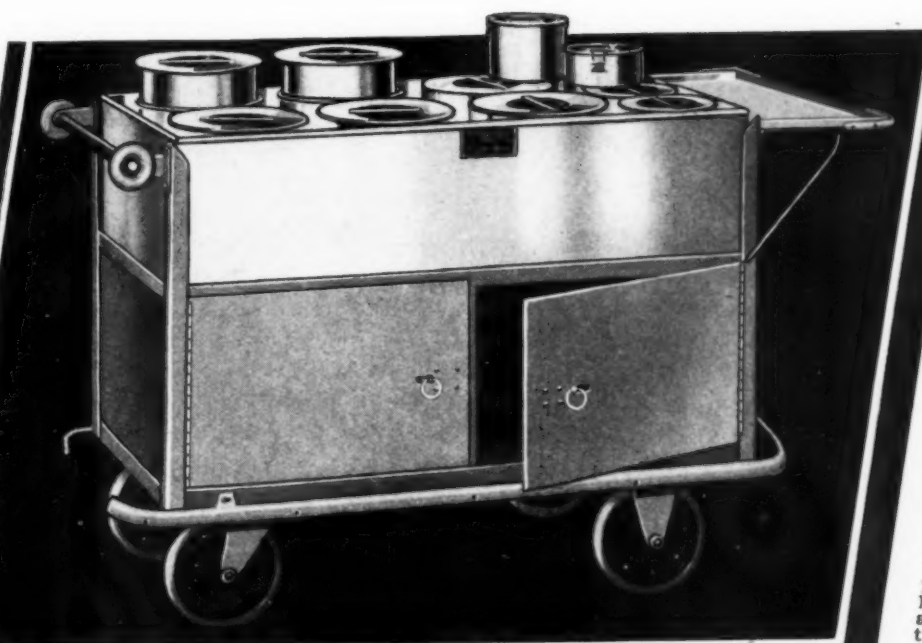
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## Ideal Food Conveyors

### Electric and Non-Electric Types

Ideal Food Conveyors are made in two general types. Both are similar in appearance, size and general structure but one is electrically heated and the other is "thermal" or temperature-retaining. The thermal type keeps the food hot or cold without the application of artificial heat or cold. The electric type maintains temperature by means of electric elements.

Both types are thoroughly insulated, so that temperature losses are reduced to a minimum, and the other so that current consumption is kept at an absolute minimum.

Heat loss is slower in the Ideal Food Conveyor while serving is going on than in any other similar type of conveyor.

### Ideal Electric Conveyors

Ideal Electric Conveyors maintain temperature by means of heat applied by electric elements. The temperature is kept at a specific, predetermined degree—low enough to prevent re-cooking and high enough to maintain freshness and palatability.

Ideal Electrics use ordinary current—wall outlet or base plug. The conveyor is usually pre-heated before the food is put in the conveyor. It is then wheeled to where service is to be made and if considerable time is to elapse before service the current may be again applied.

### Ideal Thermatic Conveyors

Ideal Thermatic Conveyors retain temperature on the same principle as the "Thermos" bottle. This is by thorough insulation against outside temperatures. Loss of inside temperature is so low that for all practical purposes the temperature may be said to be maintained.

Food served from an Ideal is appetizingly fresh for a considerable time after it has left the kitchen.

There is no cooked over, warmed up or restaurant taste. Vegetables are crisp and tender, potatoes stay snow white and fluffy. Meats do not become dried out and tasteless.

# MERIT SHOWS UP IN LONG-TIME SERVICE IN SUPERIOR UTILITY

**UNIFORM HEAT  
AROUND FOOD  
MEANS BETTER  
SERVED FOOD**



Hospital executives are unusually exacting in their ideas regarding business matters. They are probably less affected by "salesmanship" than any other class in the business world. Selecting equipment like food conveyors is a problem they are rightly facing strictly on a basis of facts—not politics.

Regarding ourselves as specialists in food conveyor systems, we yet admit the great contribution made by hospital people to our business. They have demanded dura-

bility and utility in the equipment, but within certain limitations. The Food Conveyor should be durable, rigid, yet easy to move. It must not only just "work," but must give uninterrupted service.

Ideal Food Conveyors move noiselessly on Colson Casters, so well balanced that little effort is required to move them. Monel Metal is used where needed. Uninterrupted service is assured by the no-burn-out elements. Economy of operation and ease of installation are assured by the fact that no special wiring is required. Rubber bumpers protect the walls of the hospital, and the conveyor. Here is genuine mechanical and electrical excellency at reasonable cost.

Interesting book "Scientific Hospital Meal Distribution" will be sent on request.

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The Canadian Fairbanks-Morse Co., Ltd.  
"Branches in the Principal Canadian Cities"

*Ideal*  
**Food Conveyor Systems**  
Found in Foremost Hospitals

## News of the Month

### Dr. Walter H. Conley Retires— Plans a Year Abroad

After a record of more than twenty years of service in the hospital field in New York City, Dr. Walter H. Conley, director, the Metropolitan Hospital, will retire shortly, under the retirement rules of New York. Doctor Conley will sail for France on May 31 where he plans to spend a year of rest.

Doctor Conley has filled at various times almost every administrative position in the department of hospitals, says the *Bulletin of the American Hospital Association*. He has been a member of the American Hospital Association during his entire administrative experience. He is a member of the present board of trustees.

### Michigan Association Makes Plans for a Two-Day Session

"Coordination of Departments" will occupy the program for the first morning of the Michigan Hospital Association meeting to be held in Grand Rapids, May 28 and 29. The basis of the morning's discussion is a paper

by Dr. Stewart Hamilton, superintendent, Harper Hospital, Detroit, on that subject. The paper will be divided into several sections, with intervals given for discussion.

The afternoon program of the first day will be given over to a discussion of dietetics, records, staff problems and nursing problems.

A "Clinic on Administration" is planned for the second day. This will consist of a tour of inspection of the principal Grand Rapids hospitals.

### California Dietitians Prepare for Four-Day Convention

The California Dietetic Association will hold its annual meeting in Santa Barbara, May 13 to 16.

A program of unusual interest has been planned. Experiments now being carried on at the Potter Metabolic Clinic will be discussed as well as follow-up work of last year's program. Various administrative problems will also be discussed. The new kitchens of Santa Barbara Cottage Hospital will be open for inspection.

(Additional news items will be found on page 154.)

## Coming Meetings

#### American Association of Hospital Social Workers.

President, Edith M. Baker, Washington University Dispensary and Allied Hospitals, St. Louis.  
Executive secretary, Helen S. Beckley, 18 East Division Street, Chicago.  
Next meeting, Boston, June 7-14.

#### American College of Surgeons.

President, Major General Merritte W. Ireland, Surgeon General, U. S. Army, Washington, D. C.  
Director General, Dr. Franklin H. Martin, 40 East Erie Street, Chicago.  
Next meeting, Philadelphia, October 13-17.

#### American Hospital Association.

President, Dr. Christopher G. Parnall, Rochester General Hospital, Rochester, N. Y.  
Executive secretary, Dr. Bert W. Caldwell, 18 East Division Street, Chicago.  
Next meeting, New Orleans, October 20-24.

#### American Nurses' Association.

President, S. Lillian Clayton, Philadelphia General Hospital, Philadelphia.  
Secretary, Susan C. Francis, Children's Hospital, Philadelphia.  
Next meeting, Milwaukee, June 9-14.

#### American Occupational Therapy Association.

President, T. B. Kidner, 175 Fifth Avenue, New York City.  
Secretary-treasurer, Mrs. Eleanor Clarke Slagle, 175 Fifth Avenue, New York City.  
Next meeting, New Orleans, October 20-24.

#### American Protestant Hospital Association.

President, Luther G. Reynolds, Seattle General Hospital, Seattle, Wash.  
Executive secretary, Dr. Frank C. English, Hyde Park, Station O., Cincinnati.  
Next meeting, New Orleans, October 17-20.

#### American Society of Clinical Pathologists.

President, Dr. J. H. Black, Dallas, Texas.  
Secretary-treasurer, Dr. H. J. Corper, Metropolitan Building, Denver, Colo.  
Next meeting, Detroit, June 20-23.

#### Children's Hospital Association of America.

President, Dr. Howard Childs Carpenter, 1805 Spruce Street, Philadelphia.  
Secretary-treasurer, Bena M. Henderson, Milwaukee, Children's Hospital, Milwaukee.  
Next meeting, New Orleans, October 20-24.

#### Georgia Hospital Association.

President, Dr. C. S. Lentz, University Hospital, Augusta.  
Secretary, J. B. Franklin, Georgia Baptist Hospital, Atlanta.  
Next meeting, Augusta, May 13.

#### Hospital Association of New York State.

President, Dr. C. W. Munger, Grasslands Hospital, Valhalla.  
Secretary, Boris Fingerhood, United Israel-Zion Hospital, Brooklyn.

Next meeting, New York City, May 8-10.

#### International Catholic Federation of Nurses.

President, Alice M. O'Halloran, 847 Wynnewood Road, Overbrook, Philadelphia.  
Executive secretary, Margaret E. Molloy, International Headquarters, Suite 130, 430 South Michigan Avenue, Chicago.

Next meeting, Milwaukee, June 6-8.

#### Michigan Hospital Association.

President, Dr. D. M. Morrill, Director, Blodgett Memorial Hospital, Grand Rapids.  
Secretary, R. G. Greve, Assistant Director, University Hospital, Ann Arbor.

Next meeting, Grand Rapids, May 28 and 29.

#### Minnesota Hospital Association.

President, J. J. Drummond, Worrell Hospital, Rochester.  
Secretary, J. G. Norby, Fairview Hospital, Minneapolis.

Next meeting, St. Paul, May 23 and 24.

#### National League of Nursing Education.

President, Elizabeth C. Burgess, Columbia University, New York City.  
Secretary, Nina D. Gage, 370 Seventh Avenue, New York City.

Next meeting, Milwaukee, June 9-14.

#### National Organization for Public Health Nursing.

President, Anne L. Hansen, 181 Franklin Street, Buffalo, N. Y.  
Director, Katherine Tucker, 370 Seventh Avenue, New York City.

Next meeting, Milwaukee, June 9-14.

#### National Tuberculosis Association.

President, Dr. Linsley R. Williams, Academy of Medicine, New York City.  
Managing Director, Dr. Kendall Emerson, 370 Seventh Avenue, New York City.

Next meeting, Memphis, Tenn., May 7-10.

#### New Jersey Hospital Association.

President, Rev. John G. Martin.  
Executive secretary, Thomas J. Golden.

Next meeting, Atlantic City, May 22 and 23.

#### North Carolina Hospital Association.

President, Dr. D. A. Garrison, Gastonia.  
Secretary, Dr. V. L. Grady, Wilson.

Next meeting, Gastonia, May 27-29.

#### Ontario Hospital Association.

President, R. H. Cameron, 62 Wells Hill, Toronto.  
Secretary-treasurer, Dr. F. W. Routley, Medical Arts Bldg., Toronto.

Next meeting, Toronto, October 1-3.

1855 • SEVENTY-FIFTH ANNIVERSARY • 1930

## Stemming a possible source of infection

Infections appearing in hospitals, either singly or in groups, have been the object of frequent investigations. Crane Co., collaborating with the Chicago Board of Health, has discovered one of the most pernicious sources of these infections . . . and has stemmed it.

The cause, as was demonstrated at the last convention of the American College of Surgeons, is found in the siphoning of polluted water from fixtures with submerged inlets into the main water system, where it can be drawn into other fixtures.



*From Fixtures equipped with this Crane water controlled flush valve, C13008 H, no contaminated water can be drawn into the main pipes.*

The remedy, as perfected by Crane engineers, is a vacuum breaker valve with which baths, sinks, closets, all such infection threatening fixtures can be equipped. It provides full assurance against back siphoning.

This valve can be examined at the National Crane Exhibit Rooms. If one of them is not convenient to you, full information can be had by getting in touch with Crane hospital plumbing experts.



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## News of the Month

### Single Standard Length for Sheets Is Recommended

A single standard of 108-inch torn length for sheets was unanimously recommended to the Division of Simplified Practice of the Department of Commerce on March 27, 1930, by the standing committee on simplification of hospital and institutional cotton textiles. The committee further recommended the adoption of hems two inches in depth for the top and bottom of such standard length sheets.

These recommendations were based on answers received from more than 2,000 inquiries sent to members of the American Hospital Association, Associates for Government Service, the General Federation of Women's Clubs and the Y. M. C. A.'s of the country. Ninety per cent of the replies favored the 108-inch length from the standpoint of increased comfort, sanitation, and service. Eighty per cent favored even hems at the top and bottom. While two inches was the depth most frequently mentioned, depths up to five inches were suggested.

A double standard of 99-inch and 108-inch lengths was originally adopted but the standing committee was instructed to continue the survey and determine whether a single standard of length could be set up. The Division of Simplified Practice will now canvass all organizations and individuals concerned, including manufacturers, distributors and consumers. If 80 per cent of these endorse the committee's action, the recommendation will then become effective on July 1.

The members of the standing committee are: Margaret Rogers (chairman), The American Hospital Association, St. Luke's Hospital, St. Paul, Minn.; W. B. Folger, Association of Employed Officers, Young Men's Christian Associations of North America, New York, N. Y.; William A. Gately, the Cotton-Textile Institute, New York, N. Y.; Julia K. Jaffray, General Federation of Women's Clubs, Washington, D. C.; P. S. Newell, secretary, the Association of Cotton Textile Merchants of New York; Dr. E. Stagg Whitin, Associates for Government Service, New York, N. Y.

### Three-Day Meeting Planned for New York Association

The Hospital Association of the State of New York will hold its annual meeting for three days beginning Thursday, May 8, at Coney Island, N. Y.

Speakers who will likely appear on the program together with the subjects of their addresses include: Dr. John Osborn Polak, Long Island College Hospital, Brooklyn—"What Histories Should Consist of, How Long They Should Be Kept and to Whom They Belong"; V. A. Zimmer, director, Bureau of Workmen's Compensation, New York City—"Workmen's Compensation and the Insurance Carriers"; Dr. J. G. Copeland, superintendent, Albany Hospital, "Relation Between the Superintendent and the House Staff"; James U. Norris, superintendent, Women's Hospital, New York City—"Selection and Organization of Hospital Personnel"; John A. McNamara,

executive editor, THE MODERN HOSPITAL—"Budget Making for the Hospital"; Dr. Malcolm T. MacEachern, director of hospital activities, American College of Surgeons—"Ratio of the Hospital Personnel to the Bed Capacity"; Dr. Norman E. Titus, New York City—"Physical Therapy and Its Place in a General Hospital"; Dr. E. H. L. Corwin, New York Academy of Medicine—"Blood Transfusions and Donors"; Dr. C. G. Scherf, superintendent, Coney Island Hospital, Brooklyn—"Relation of the Superintendent of Nurses to the Superintendent of the Hospital"; Cornelius S. Loder, consultant, New York City—"Value of Cubicles to the Patients and the Hospital."

Round table discussion will be led by Dr. Christopher G. Parnall, superintendent, Rochester General Hospital, Clarence E. Ford, department of social welfare, Albany, and Helen Wood, Strong Memorial Hospital, Rochester.

### Trustee's Gift Makes Children's Department Possible

The new children's department of the Good Samaritan Hospital, Lexington, Ky., is now completed and ready for occupancy. It is the gift of one of the hospital trustees.

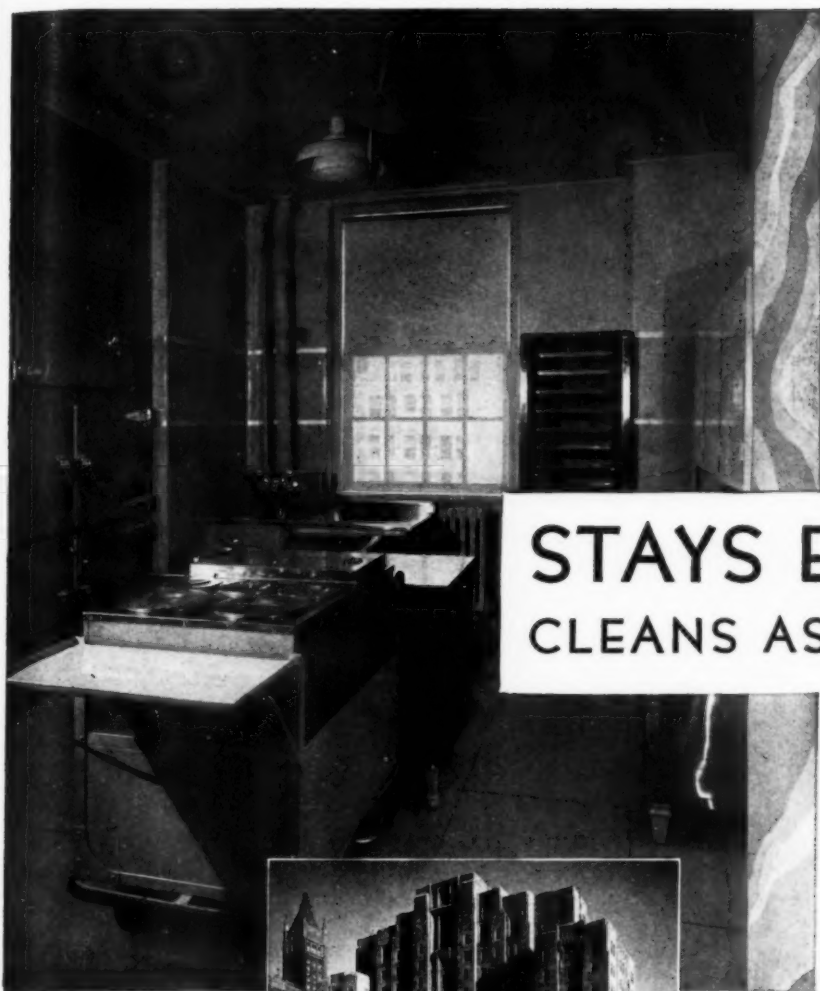
The children's department occupies the entire fourth floor of the main hospital building. It is enclosed with ultraviolet ray transmitting glass windows and is modernly equipped with all-steel furniture. It has a capacity of thirty beds.

### Delano Day Is Celebrated at St. Luke's, Chicago

March 12, the anniversary of the birth of Jane A. Delano, organizer of the American Red Cross nursing service, is being regularly observed throughout the United States as a day of commemoration and also as the day on which the annual drive for new recruits to the Red Cross nursing service is begun.

St. Luke's Hospital, Chicago, celebrated the day by entertaining a large group of enrolled Red Cross nurses who came from all over the Chicago area to see and hear the splendid demonstration of nursing procedures by Mrs. Ada R. Crocker, director, St. Luke's School for Nursing, and a member of the Red Cross committee on nursing service.

In the amphitheater on the nineteenth floor, after brief remarks by Mrs. Crocker, Edna Foley, chairman, Chicago Committee on Red Cross nursing service, and James T. Nicholson, manager of the Chicago Chapter of the American Red Cross, the graduate and student staff demonstrated the following: the complete set-up of an operating room for a major operation; the use of pillows, rubber rings and other devices for making cardiac patients comfortable; the application of a newspaper splint, a pillow splint and a blanket splint for a broken leg; the strapping for a sprained ankle and the application of a plaster cast to the foot; the use of various kinds of apparatus. Eight tables were set up to show treatment trays and dressing carriages.



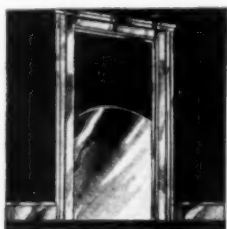
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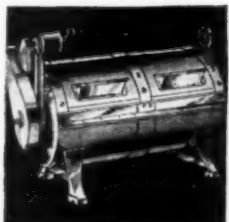


Unrusting, unstaining, easily cleaned Allegheny Metal gives a smooth, bright surface to the diet kitchen of the Passavant Memorial Hospital, Chicago, Ill. Other kitchens in this hospital are also made of this strong alloy. (Inset) Exterior view of Passavant Memorial Hospital.



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## News of the Month

### Mt. Sinai Provides for Patients of Moderate Means

Mt. Sinai Hospital, New York City, is to have a new building devoted to the care of patients of moderate means, according to a recent announcement made by Leo Arnstein, acting president of the hospital.

The building, which is expected to be completed within the year, will be ten stories high, with a two-story tower containing technical equipment and working space for the preparation of surgical supplies. Two floors will contain two major operating rooms and six will be devoted to patients.

There will be three-bed curtained wards, arranged in pairs, with a utility room and a nurses' station for each pair of wards. From each patient's bed there will be a direct view of Central Park. A spacious roof garden, a day room and porch on each floor will contribute to the comfort of the patients, according to Mr. Arnstein.

### Date for Second International Hospital Congress Is Set

The date for the second International Hospital Congress has been set for the week of June 8, 1931, according to an announcement by the executive committee.

Plans are being made for a preconvention trip for the American delegation. Tentatively these plans will include London, Copenhagen, Hamburg and Berlin. From Berlin the delegation will go to Vienna, where the congress is to take place. Those who wish to stop at Munich may do so, and others who wish to stop over at Prague will have an opportunity to stay there for a day or so. After the congress, Budapest will be visited. It is estimated that the preconvention tour will take two weeks.

Those from the United States who plan to participate in the preconvention tour will have to arrange to leave the states by the middle of May.

### Minnesota Association Will Discuss Hospital Costs

A full day's program on Friday, May 23, which will extend over into a staff conference on Saturday morning has been planned for the meeting of the Minnesota Hospital Association.

The meeting will open with the registration of members and visitors. A general session will follow the registration, at which J. J. Drummond, manager, Worrell Hospital, Rochester, and president of the association, will preside. Three papers will be presented at this session: V. I. Sandt, superintendent, Fairview Hospital, La Porte, Ind., will discuss the "General Administration of a Small Hospital"; John C. Dinsmore, assistant director, University of Chicago Clinics, will tell of "Methods of Properly Reducing Hospital Supply Costs," while Mary A. Foley, director of dietetics, the Kahler Corporation,

Rochester, Minn., will speak on the subject of "Smoothing Off the Rough Edges."

The afternoon will be devoted to a business session at which one paper, "Absorption of Small Charges," will be given by L. C. Austin, superintendent, Mt. Sinai Hospital, Milwaukee. An open forum will be led by Dr. R. C. Buerki, superintendent, State of Wisconsin General Hospital, Madison, on "Small Economies in the Hospital."

A banquet will be held on Friday evening at which Dr. Lotus D. Coffman, president, University of Minnesota, will be the guest speaker.

The Saturday morning program will consist of a staff conference by either a St. Paul or Minneapolis hospital.

### New Hospital for Charleroi, Pa., Is Completed

The new Charleroi-Monessen Hospital is now serving the citizens of the community in and near Charleroi, Pa.

The building is a three-story, four-floor structure of late English design. It is of fire resistive, brick construction and cost \$325,000. Equipment costing more than \$70,000 has been installed.

A total of eighty-five beds, thirty of them in private rooms is the normal capacity of the hospital.

Loretta Sheridan is the superintendent.

### Group Nursing to Be Feature of Gotham Hospital

A hospital that is especially designed for group nursing is the Gotham Hospital which is to be built at Central Park West and 107th Street, New York City. The hospital has been projected as an institution to supply hospital care to persons of moderate means.

To finance the complete project a fund of \$6,000,000 will be sought. One half of this sum will be devoted to endowment to meet the difference between the moderate rates to be charged and the cost of the service. The building is expected to cost \$2,000,000. The site was bought for \$1,000,000.

In the group nursing system, one nurse will be able to serve two or more patients, according to their condition. In view of this plan, one of the most important features of the building will be the group nursing units which will carry out the group nursing system on a scale hitherto unknown in the hospital field.

The group nursing unit will be a complete small hospital in itself, with four private rooms opening out of a corridor, in the center of which will be the nurse's desk and the supply base. Each unit will have two utility rooms. From the vantage point of her desk, the nurse will have immediate access to the patient who needs her.

The hospital will have a capacity of 219 beds. It will have departments of medicine, surgery, obstetrics, pediatrics and neuropsychiatry. There will be fifty private beds at \$5 a day, five semiprivate at \$4 and fifty in small wards at \$3.





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*This is number 15 of a series depicting historical periods in the development of America*

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Few citizens of the United States in 1900 were seriously impressed with the "Horseless Carriage." Yet the snorting, clanking automobile of that period has evolved into a modern necessity. Its direct and indirect influence upon the industrial and cultural development of America has been phenomenal. An interesting commentary upon the status of the automobile is the fact that there are more motor cars today in America than there are bath tubs.

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## Personals

DR. W. W. BRITTON, who has been with the Homan Sanatorium, El Paso, Texas, for twelve years, has become medical director of the Southern Baptist Sanatorium in that city. He succeeds DR. J. D. RILEY who has been elected superintendent of the Arkansas State Sanatorium, Booneville.

DR. B. A. WILKES, superintendent, Missouri Baptist Hospital, St. Louis, has resigned to direct the work of the Hollywood Hospital, Hollywood, Calif., as superintendent. DOCTOR WILKES has long been active in hospital work. He was president of the Midwest Hospital Association last year, and is at this time president-elect of the Protestant Hospital Association.

MABEL CHRISTIE, superintendent, Illinois Central Hospital, Chicago, died April 23. MISS CHRISTIE has been the successful superintendent of the hospital for many years.

EDITH CAMPBELL has been named superintendent of the Masonic Hospital of Payne County, Cushing, Okla.

MARY BESHEIRS succeeds BONNIE POWERS as superintendent of the A. C. H. Hospital, Shawnee, Okla. MISS POWERS was recently a patient in the hospital, having undergone an operation for appendicitis. She plans to return to her Kentucky home for a long visit as soon as she has recovered from her present illness.

MRS. WILLIAM SWIFT, R.N., has been chosen superintendent of the Huntington City Hospital, Huntington, W. Va.

SHIRLEY TITUS, director of nursing, University of Michigan Hospital, Ann Arbor, has resigned to accept the position of dean of the department of nursing education, Vanderbilt University, Nashville, Tenn.

SISTER M. CASILDA is the new superintendent of St. Mary's Hospital, East St. Louis, Ill., succeeding SISTER ENGELBERTA.

MRS. S. W. WITTENBERG is the new president of Beth Abraham Home for Incurables, New York City, succeeding DR. E. SYRKIN, medical and general superintendent, resigned.

DR. WAYNE W. BISSELL has been chosen medical director of the Jameson Memorial Hospital, New Castle, Pa., to succeed CARL A. BRIMMER, resigned.

HAROLD A. GRIMM, superintendent, Finley Hospital, Dubuque, Iowa, has resigned to become superintendent of Millard Fillmore Hospital, Buffalo, N. Y.

DR. CHARLES E. REMY has resigned as superintendent of Montefiore Hospital, Pittsburgh. ABRAHAM OSSEROFF is the executive vice-president in charge of the hospital.

EDITH J. ACKERMAN, R.N., has resigned her position as superintendent of the Deaconess Hospital, Bozeman, Mont., and will be succeeded by EDNA M. EBERL, R.N., a graduate of the Deaconess Hospital, Great Falls, Mont.

LAURENCE R. DOUGHERTY, president of H. D. Dougherty & Co., Philadelphia, died suddenly April 20 in Philadelphia. MR. DOUGHERTY was well known in the hospital field.

DR. ETTA P. MCCORMICK has been chosen to head the New Orleans Dispensary. She succeeds DR. SARA TEW MAYO.

HELEN C. ALLEN has resigned as director of the Veterans Hospital, Livermore, Calif., because of ill health. She will be succeeded by MARGARET M. BOISE who has served as Army hostess at Ft. Douglas, Utah, and at Citizens Military Training Camp, Del Monte, Calif.

MARY ELLEN LEWIS has accepted the superintendency of Nason Hospital, Roaring Spring, Pa. She succeeds DR. W. A. NASON, founder.

ALICE JERNIGAN has resigned as superintendent of the King's Daughters' Hospital, Columbia, Tenn. ALMA FINCH, who has been assistant superintendent, has been appointed acting superintendent.

MELISSA M. DAILEY has been appointed superintendent of the Berger Hospital, Circleville, Ohio. MISS DAILEY has had varied hospital experience, having served as superintendent at the Memorial Hospital, Fremont, Ohio; Municipal Hospital, Lancaster, Ohio; Jane M. Case Hospital, Delaware, Ohio, and the Pool Hospital, Port Clinton, Ohio.

M. C. CARTER has accepted the superintendency of the Humboldt County Hospital, Eureka, Calif.

RUTH J. REIF, Lima, N. Y., has been appointed superintendent of Waterloo Memorial Hospital, Waterloo, N. Y. MRS. REIF succeeds MRS. SAMUEL YAW who has been in charge of the institution since June, 1927.

JUSTINE E. JOHNSON, Alameda, is the new superintendent of the San Luis Obispo County's General Hospital and Old Folks' Home, San Luis Obispo, Calif. The appointment follows the resignation of KATHLEEN FOLEY TAYLOR who has accepted a similar position with the new Carmel Hospital, Carmel, Calif.

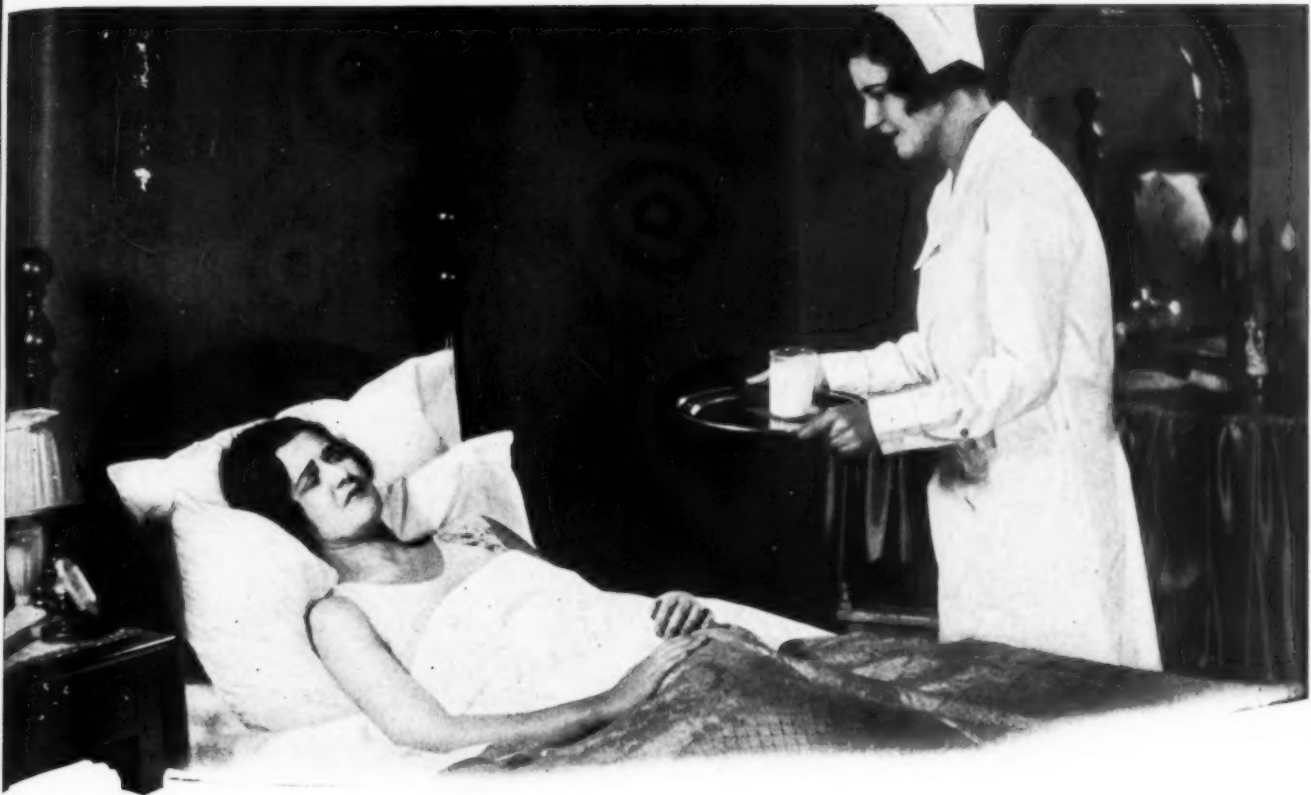
DR. HARVEY M. BECKER has been appointed acting superintendent of the Mary M. Packer Hospital, Sunbury, Pa., to serve the unexpired term of the late DR. H. W. GASS.

DR. BASIL C. MACLEAN, formerly assistant superintendent, Montreal General Hospital, Montreal, has been appointed superintendent of Touro Infirmary, New Orleans.

MRS. CHARLES M. DEAL has been appointed superintendent of the Richard Baker Hospital, Hickory, N. C., to succeed PEARL SMITH who has resigned because of ill health.

BEN F. CREWS, superintendent, Santa Cruz County Hospital, Santa Cruz, Calif., has resigned. He has been with the hospital since 1911.

JOHN J. HOLLISTER recently resigned from the superintendency of the Washington Park Community Hospital, Chicago.



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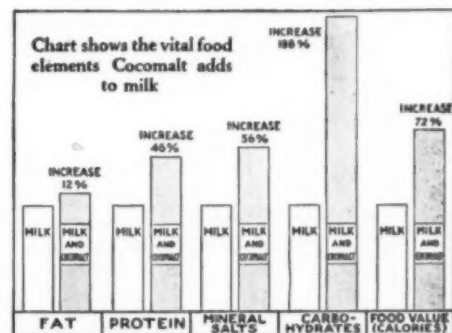
**C**OCOMALT is a balanced combination of milk protein, milk minerals, cocoa, sugar, malt and eggs—designed to be added to milk, hot or cold. So mixed, the result is a delicious, chocolate flavor food drink—high in nutritive value and extremely palatable to convalescents, children and invalids who find a plain milk regimen irksome and difficult to adhere to.

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# NURSING AND THE HOSPITAL

Conducted by M. HELENA McMILLAN, R.N.,  
Director, School of Nursing, Presbyterian Hospital, Chicago

## The Value of Cooperation in Ward Administration

By GLADYS SELLEW, M.A., B.S., R.N.\*  
Assistant to the Dean, Illinois Training School for Nurses

THE function of the nursing department to be discussed in this chapter is the necessity of perfect cooperation between the nursing department and other departments of the hospital. The accompanying diagram taken from Chapman's "Hospital Organization and Management" illustrates the relation of various departments of the hospital, as the hospital superintendent thinks of the situation.

The work of the various departments converges on the ward. For this reason the head nurse usually comes into more direct and constant contact with the personnel of the other departments than does any other member of the nursing body. Cooperation means much more than can ever be comprised in any set of rules, but rules decided upon by the head of the department tend to minimize the friction due to the personal element.

Cooperation between the nursing department and the medical department is based on a clear understanding of the fact that the nursing care of the patient is absolutely under the direction of the medical staff. Growth in the medical profession does not rest on attempts to take over into the nursing departments responsibility that should rest with the physician, but rather to improve our share of the work.

That the nursing care to be given the patient is under the absolute direction of the physician does not imply that the nursing body is under the control of the medical staff in other matters.

There are many points that should be arranged by the heads of the administrative department, the nursing department and the medical department, their decision to be adhered to by all members of the various departments. Mimeographed copies of their decisions should be available to all that need them. The head nurse is responsible for seeing that such decisions (as far as they apply to the work in the wards) are carried out as prescribed. For example: methods of writing orders for medication or treatment, abbreviations to be used, and hours at which rounds may be made or nurses called upon to assist with treatments (other than emergencies).

\*A chapter from her recently published book, "Ward Administration." W. B. Saunders Company, Philadelphia.

Good ward management is the best cooperation that a nurse can give, and secures as far as circumstances will permit good nursing care to the individual patient.

The modern tendency is toward centralization and standardization. The degree of centralization and standardization is decided by the administration, with reference to the hospital as a whole. Both of these methods for the simplifying of hospital work have a great effect on ward administration.

By standardization of equipment is meant that there are comparatively few different sizes and types of each kind of articles required in the running of the hospital. The following list, giving the standard sizes of a few articles on the linen list, may illustrate the meaning of "standardization."

Bed pads	.....	3 sizes, 36 by 36
		36 by 72
		36 by 76
Pillow cases	.....	2 sizes, 36 by 42
		36 by 45
Sheets	.....	3 sizes, 63 by 99
		72 by 99
		72 by 108
Draw sheets	.....	2 sizes, 54 by 72
		45 by 72
Bed spreads	.....	2 sizes, 63 by 90
		72 by 90
Bureau scarfs	.....	2 sizes, 18 by 45
		18 by bolt
Bath towels	.....	2 sizes, 18 by 36
		22 by 44
Face towels	.....	2 sizes, 16 by 32
		18 by 36
Hand towels	.....	2 sizes, 13 by 18
		18 by bolt

The plan for reducing the number of sizes and types of each kind of article is being pushed throughout the hospital—fewer types of instruments and skin and hypodermic needles and fewer types of gauze dressing and sponges. If the time ever comes when hospitals can agree on the sizes of dressing and sponges that are re-

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DATA FROM WHICH LINEN REQUISITION IS MADE								
Name of article	Standard per patient per day using designed article	Number of patients using designed article	Standard for articles used for ward as a whole		Number on hand in linen-closet	Emergency standard for ward as a whole		Order
			Per day	Per week		Standard	Deviation from standard	

If made in this form, the head nurse herself is helped to make a legitimate order, and the supervisor and head of the linen room have a clear idea of the reason for the order. Emergencies can be cared for by special order from the linen room or an emergency supply may be kept on each ward.

A few hospitals do not have a central linen room, having instead a definite supply for each ward, the linen being washed and returned to the ward from which it was sent. If this is done, a total, as opposed to a daily standard, must be made, although the daily standard is still necessary for a check on the daily use of the linen. The total linen standard is an adaptation of the daily requisition standard which is also presented here.

For the central linen supply the standard is computed for the average number of patients in the hospital. The daily census for the hospital is not subject to as great proportional variations as is the daily census of each individual ward. The reserve supply of linen for the central linen room, therefore, need never be as great in proportion to the total linen supply as the sum of the reserve linen supplies on all the wards under a decentralized system of handling linen.

The linen inventory should give this information:

If a centralized system is used:

1. Linen in use (on the wards).
2. Soiled linen both on the wards and in central room for soiled linen.
3. Linen in reserve.
4. Linen in laundry.
5. Total.
6. Comparison with standard for hospital.
7. Comparison with statement on books.

If a decentralized linen system is used, the following information must be given for each ward:

1. Linen in use on ward.
2. Soiled linen on ward.
3. Linen in reserve on ward.
4. Linen in laundry.
5. Total for ward.
6. Comparison with standard for ward.
7. Comparison with statement on books.

Concerning a method of keeping a perpetual inventory, the inventory is best kept by the card file system, although the same results may be achieved with paper forms. There should be a card for each type of article, filed

alphabetically. The card shows at all times the number of articles of that type on hand. For instance:

Sheets 63 by 99 inches.

January 1, 1928.....1,000

January 5, 1928, 200 received.....1,200

February 1, 1928.....1,200

The inventory should be taken frequently.

There should be an inventory of all ward equipment, diet kitchen equipment, glassware, enamel, rubber goods, instruments and needles.

If the central tray service system is used, the equipment does not come under the supervision of the head nurse. If, however, the trays are served from the ward diet kitchen, the standard and method of inventory and the current inventory of the equipment are handled in the same way as the other equipment on the ward. As in the case of the central linen supply, less equipment is needed if the serving is handled from a central unit.

If the trays necessary for nursing procedure and the doctor's work are sent from a central supply room, the amount of equipment needed for the hospital as a whole is reduced. If the supply for each ward is kept upon the ward, the standard should be based on the equipment needed for the procedures to be carried out on the ward. The daily routine will help in ascertaining the amount of each type of equipment needed. The method of handling the equipment must also be considered; whether its use may be practically continuous or if after care and preparation for further use require some time. The boiling of rubber goods as opposed to dry sterilization carried out once or twice a day illustrates the point.

The perpetual inventory is best kept by the card file system. There should be a card for each article, with the number on hand of that type of article, space for renewal, etc. The actual number of articles on the ward should be ascertained at certain set intervals and compared with the number shown by the cards issued.

Many hospitals have a cost accounting system in which each ward is charged for all equipment issued to the ward. The average length of service of each article is ascertained and is used as one factor in the standard by which to gauge the efficiency of the head nurse. The length of service seems to me an unfair gauge since the charge of breakage or destruction is in proportion to the number of times the piece of equipment is used and not



## Down the Death-Lined Streets a Tall, Gaunt Figure Strode

In 1879, a certain southern city was fighting its most desperate battle.

Throughout the town, unseen hosts of Yellow Fever germs made swift, silent raids, leaving grim trails of disease and death. Business stood still. Guardsmen patrolled the otherwise deserted streets.

Medical men fought desperately to stem the ever-swelling legions that marched against them.

Into this picture the first Clow Soldier of Sanitation was called. Down the death-lined streets he strode, a tall, gaunt figure—but the figure of vic-

tory. He cleaned up the sources from which the Yellow Fever armies drew replacements. And the medical men wiped out the enemy.

Today this man leads Clow's Soldiers of Sanitation in equally important battles against uncleanness, insanitation, pollution and disease.

Each of these men is a specialist in working out plumbing installations in the public places, where disease germs rally so readily. At his finger tips is the experience from a time long before the great battle in a southern city—to the

modern battles in the schools, hospitals, industrial plants and public buildings of today. At his back is the most complete line of specialized plumbing fixtures in the world, designed to help him as no other fixtures can.



For 52 years, Mr. W. E. Clow, Sr., has led Clow's Soldiers of Sanitation by crowding into the heat of every fight where his years of skillful experience will turn the battle against insanitation, trouble and waste.

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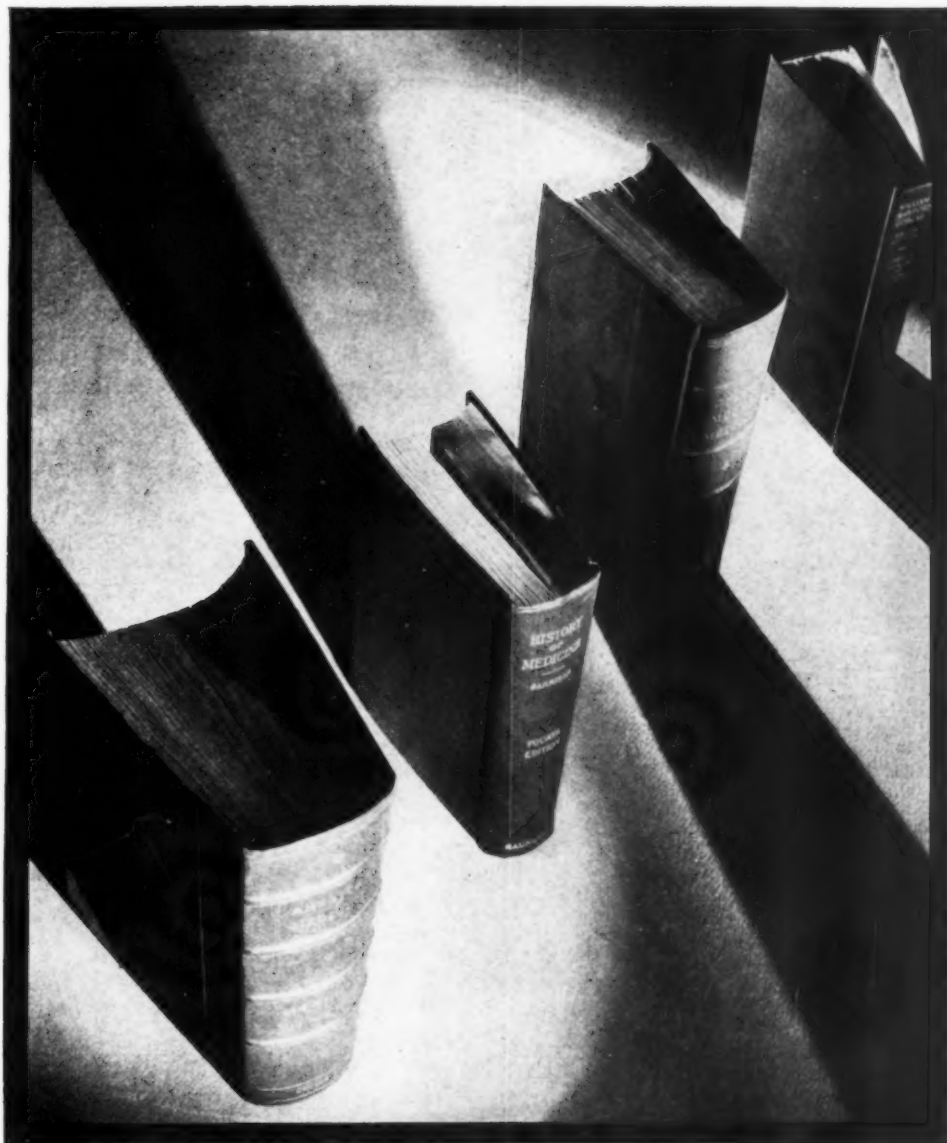
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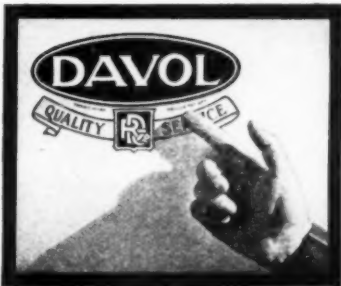


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## DIETETICS AND INSTITUTIONAL FOOD SERVICE

Conducted by ANNA E. BOLLER, Central Free Dispensary at Rush Medical College, Chicago

# Treating Simple Obesity in an Out-Patient Clinic

By THELMA TUBBS CURRIER, B.S.  
Dietitian, Peter Bent Brigham Hospital, Boston

**O**BESITY definitely presents a factor that plays an important rôle in the life of a great many individuals in this age. One reason, perhaps, is that the present day fashion in women's clothes makes excess weight more apparent and more undesirable than in the days when pronounced curves were fashionable. This great desire for similarity in general appearance has been of much aid in getting women to diet for overweight. The other, and undoubtedly the important reason is that after all obesity must be given consideration in connection with its relation to matters of general health.

The importance of average weight is given careful consideration by insurance companies, so much so that some individuals who have always prided themselves on being hale and hearty are surprised, shocked and displeased when life insurance has been refused to them on the grounds of overweight. It has been shown that the span of life for an obese individual is likely to be shortened considerably in comparison with an individual of average weight, all other factors being equal.

During the past five years we have had the opportunity to study a group of women in the out-patient department

TABLE I—OBESITY DIET PRESCRIBED IN THE NUTRITION CLINIC OF PETER BENT BRIGHAM HOSPITAL, BOSTON

	Weight Grams	Average Measure	Calculation <sup>1</sup>
<b>MORNING:</b>			
Fresh fruit, except banana, without sugar.....	100	1 serving	10 — 0 — 0
Egg .....	30	1	0 — 6 — 6
Bread .....	30	1 average slice	18 — 3 — 0
Butter .....	5	1 teaspoon	0 — 0 — 4
Milk .....	30	2 tablespoons	1.5 — 1 — 1
Sugar .....	5	1 teaspoon	5 — 0 — 0
Tea or coffee as desired.			34.5 — 10 — 11
<b>NOON:</b>			
Meat, fish or chicken .....	120	¼ pound	0 — 28 — 12
Potato .....	90	1 average size	18 — 3 — 0
Vegetables 3 per cent, those that grow above the ground .....	300	2 saucers	10 — 5 — 0
Fresh fruit, except banana, without sugar.....	100	1 serving	10 — 0 — 0
Butter .....	5	1 teaspoon	0 — 0 — 4
Milk .....	30	2 tablespoons	1.5 — 1 — 1
Sugar .....	5	1 teaspoon	5 — 0 — 0
Tea or coffee as desired.			44.5 — 37 — 17
<b>NIGHT:</b>			
Same as noon.....			44.5 — 37 — 17
Total grams per day.....			124 — 84 — 45
Calories .....			4 — 4 — 9
Total calories per day.....			496 — 336 — 405
Total, 1,237 calories per day.			

<sup>1</sup> This rough calculation is not included on the slip given to the patients.



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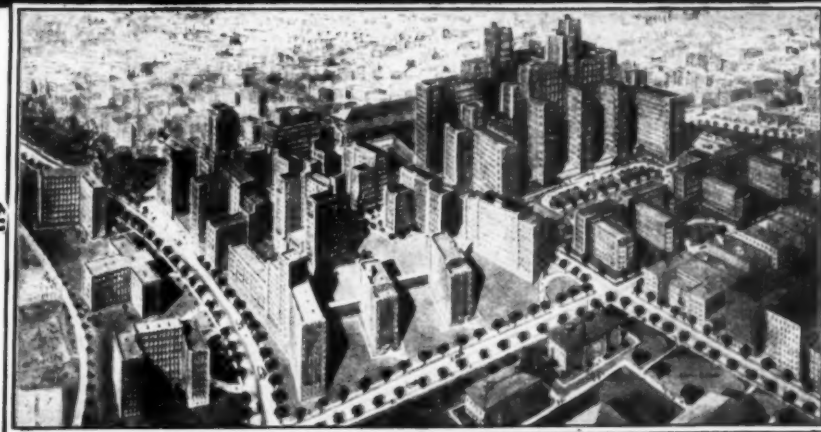
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At left—Columbia-Presbyterian Medical Center, New York City—the Harkness Pavilion and Sloane Hospital units of which are Gorham equipped.

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of the Peter Bent Brigham Hospital. The group as a rule has been composed of women between twenty and sixty years of age. The majority of those studied have been of foreign birth although some are American born. Some in the group have shown themselves to be intelligent, interested and cooperative, while others, less intelligent, visit the clinic because the doctor has frightened them in an attempt to make them realize that obesity is a real danger. The women studied were examples of true obesity. The excess fat seemed to be deposited on the body in layers, their posture was typically bad and they often complained of fatigue.

The organization of the clinic has been previously described<sup>1</sup> but it might be well to give here a brief review of the work. The patients who are seen in the nutrition clinic have been examined by the doctor in the general medical clinic. The doctor makes a note on the patient's

weight and become "skinny," as they express the condition. Their husbands are used to seeing them fat and most of them have the idea that flesh denotes strength and health. So no encouragement comes from the family. Second, there seldom is the complication of disease to help frighten them into adopting a certain diet. In diabetes, for example, if the patient does not follow instructions with regard to his diet his physician or the dietitian tells him of the serious consequences that will result. In uncomplicated cases of obesity one can only endeavor to paint a picture of discomfort and the lack of a trim figure in an attempt to induce the patient to follow the prescribed diet. Third and last of the specific problems is the one due to the fads of dieting in the present day. There are so many popular reduction diets with an exponent for each that most persons are frankly bewildered. The craze for the so-called eighteen-day diet almost disrupted the morale of the clinic.

Many methods are employed in prescribing diets to the obese. Diets of low caloric content are used in some clinics with the idea that the patient always will eat over the allowance. We have often found the opposite to be the case. The idea is often accepted that to diet means to abstain rigorously from food. If too low a diet is outlined the results may be serious. As a group, dietitians have a tendency to become so engrossed in the actual details of the diet that they neglect the needs of the individual. When a diet is to be outlined, no matter whether it is for a person who is obese, has diabetes or is malnourished, the person to eat the diet must be the first consideration. Consider his needs as they fit his work, his play or his general activities. It is difficult to cater to the many personal likes and dislikes of food. Probably it is best to work out a general outline rather than to indicate specific foods. This outline will furthermore aid in the teaching of the patient of ways to vary his daily diet. There is bound to be a certain monotony. If the patient gets too dissatisfied and discouraged with this sameness of diet it is often wise to discontinue the diet for a week or ten days. After this unexpected holiday the diet will be attacked with renewed vigor and enthusiasm.

#### Patient Must Have Encouragement

Considerable time is spent in the clinic in trying to point out to the patient the value of the diet. Encouragement to follow the diet needs to be given generously. Families as a whole are usually out of sympathy with another member on a diet. In a spirit of playing a prank they often try to get the member in question to break away from the diet. They do not realize that each time the diet is not adhered to makes the period of dieting just that much longer. It takes very little discouraging by some member of the family to make the person who is dieting feel that the diet is a waste of time.

With these problems in mind the diet of simple, available foods, shown in Table I, has been compiled and prescribed routinely for obese patients.

The following general directions accompany each diet list:

- Eat lettuce and mineral oil mayonnaise, as desired.
- Eat clear broth with fat removed, as desired.
- Eat no sugar.
- If hungry between meals, eat fresh fruit, except bananas, without sugar.
- Drink from six to eight glasses of water a day.
- Eat nothing except what is on the list.
- Eat the vegetables that grow above the ground rather than below.

TABLE II—CLASSIFICATION OF FOODS ON A GENERAL OBESITY DIET

<i>Fruits</i>	<i>Vegetables</i>
<i>5 Per Cent</i>	<i>3 Per Cent</i>
Grapefruit	Cauliflower
	Egg plant
	Cabbage
	Radishes
<i>10 Per Cent</i>	
Orange	
Fresh peaches	<i>5 Per Cent</i>
Fresh pineapple	String beans, old
	Turnip
	Squash
<i>15 Per Cent</i>	Beets
Apples	Carrots
Pears	Onions
Cherries	Green peas, young
Grapes	
Melons	
	<i>Meat</i>
	Beef
	Mutton
	Lamb
	Veal
<i>Vegetables</i>	
<i>3 Per Cent</i>	
Lettuce	
Celery	<i>Poultry</i>
Spinach	Fowl
All greens	Roosters
String beans, young	
Asparagus	<i>Fish</i>
Mushrooms	Bluefish
Tomatoes	Cod
French artichokes	Flounder
Cucumbers	Haddock
Brussel sprouts	Halibut
Watercress	Salmon
Okra	Oyster

record concerning any condition that he wants to have given special consideration. This record is sent to the nutrition clinic with the patient. A routine food intake was taken at first in an attempt to ascertain the food habits of the patient. In the majority of cases a routine food intake seemed of little value from either an educational or statistical point of view. Some general conversation in regard to food habits precedes the actual explanation of the diet. This talk gives more light on the previous diet as concerned with obesity than a more formal method. The intelligence of the patient, of course, must always be taken into consideration.

The most common and difficult problems to combat with the patient are: First, a vast majority of these women who are foreign have not the slightest desire to lose

<sup>1</sup> Organization of a Nutrition Clinic, pp. 63-65. Trained Nurse and Hospital Review, July, 1929.

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## One Reason why Women Criticize Hospitals

An intimate detail in  
hospital service which  
should be given spe-  
cial consideration.

THE impressions which women take home from your hospital—and tell their friends—are often gathered from little things which are seemingly unimportant. Even a detail of service, such as toilet soap—if it is not the complexion soap that women like—may be “just one more thing” for an irritable patient to criticize.

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*Mineral Oil Mayonnaise*

Egg yolk, 1  
Mineral oil, 1 pint  
Vinegar, to taste  
Salt, to taste  
Pepper, to taste  
Mustard, to taste

Beat the egg yolk until it is stiff. Then beat in one teaspoonful of vinegar. Add the oil drop by drop, beating constantly. Finally add vinegar to thin the dressing to the desired consistency, and seasoning. As much as two tablespoonfuls of this dressing may be used at each meal without counting any food value.

If unusual interest is displayed it is found helpful to include the classification of foods shown in Table II.

As a whole the patients on the diet are contented. During the first period they almost always have a tremendous appetite and it takes a good deal of will power to follow the régime. There is one general complaint—that the diet has a tendency more than to satisfy at each meal. Shortly afterward the patient is hungry. This expressed need accounts for the use of fresh fruits between meals. If the diet can be carefully followed for a few weeks, half of the battle is won. There seems to be a tendency to lose the craving for food either great in quantity or concentration. Discontinuing the diet even for a day, unless the patient is discouraged or is ill, upsets the routine enough so that the problem is nearly as great as starting the diet again from the beginning.

*Results Have Been Gratifying*

The loss of weight is rapid at first. It is not unusual for a person to lose five pounds during the first week. Ideally we attempt to have our patients lose an average of two pounds a week. We have kept in touch with those who have lost more than ten pounds in periods varying from eight to fifty-five weeks.

From April, 1925, until January, 1930, 596 persons, chiefly women, were given instruction in reduction diets. Of this group 149 lost ten pounds or more. The following classification has been made of the cases studied:

Patients who did not return after the first visit, 35 per cent.

Patients who lost less than ten pounds, 35 per cent.

Patients who did not respond to treatment, 5 per cent.

Patients who lost more than ten pounds, 25 per cent.

We felt in general that the patients who did not respond to treatment could be classed as follows: uncooperative, refusing to follow instructions; insincere in the desire to lose weight; discouraged, returning only for two or three visits. On the other hand, some of the cases classed as uncooperative may have had family problems that we failed to investigate. It would, undoubtedly, be much to our advantage to be able to devote more time to patients who do not respond to the treatment. Some interesting observations might result showing various reasons why a diet was not practical.

This method of handling cases of simple obesity in an out-patient clinic is not necessarily ideal. We have obtained, however, some gratifying results that give us the courage to continue this form of treatment.

If we can continue to help 25 per cent of the women who are seriously hampered by obesity, our time is well spent. When the patients return to the clinic satisfied with their diets and pleased to have lost weight, they are a definite inspiration to the new patients.

## The Social Service Dietitian—Her Duties and Qualifications

That the social service dietitian is the logical interpreter of the work of the research nutritionist in the laboratory to the public, is pointed out by Dr. Lydia J. Roberts, association professor of home economics, University of Chicago, in a paper in the *Journal of the American Dietetic Association*. The social service dietitian takes the facts that the research nutritionist has discovered about food and the body's need of it and translates them into terms of everyday living.

The work of the social service dietitian lies in the three fields, Doctor Roberts says—in the public school; in the infant welfare or similar organizations; in the clinic or out-patient department. In the school, she outlines the nutrition work for the grades, instructs the teachers in the fundamental facts about nutrition and in methods of presenting the information to the pupils and discusses the problems of nutrition with parents. In her infant welfare work, she gives advice to mothers of preschool children. She holds individual conferences with the mothers, she holds classes and demonstrations for groups of mothers and makes regular visits to the home to see that a normal nutrition and health program are put into effect.

In the clinic or out-patient department, the social service dietitian must teach and demonstrate to the patient or some member of the family how to plan, purchase, prepare and administer the diet. Often the patient has a preliminary course in the hospital during which his special diet is worked out and his education begun, but more often everything must be done in the clinic and the patient's home.

What training and personal qualities are required to make a successful social service dietitian? Doctor Roberts sums them up as follows: all the knowledge of nutrition possessed by the college teacher of nutrition; the special knowledge and experience of the hospital dietitian with diet therapy; the sympathy, understanding and teaching ability of both the primary and high school teacher; the knowledge of human problems and some of the technique of the social worker; the knowledge of factors influencing human behavior possessed by the psychologist; the persuasive arts of the advertising artist, the high pressure salesman or the stump orator.

## Graduate Course for Dietitians Is Announced

A graduate course for dietitians is to be offered at Reading Hospital, Reading, Pa., according to a recent announcement. The course is designed to give the necessary practical training in a hospital to graduates of home economics schools before they can secure positions in hospitals as dietitians.

The course will cover a nine months' period and will include three months in the dietitian's office, three months in the private kitchen and three months in diet therapy. These services will give the student an opportunity to become familiar with hiring and controlling help, buying supplies, planning menus, inspecting and distributing food, computing food costs, interpreting charts, laboratory records and doctors' orders and planning the lay-out of equipment.

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## OUT-PATIENT SERVICE

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Director for Medical Services, Julius Rosenwald Fund, Chicago

# What Shall Be the Standards of the Mental Hygiene Clinic?

By ELIZABETH GREENE

Psychiatric Social Worker, Brooklyn Y. W. C. A., Brooklyn, N. Y.

**W**ITHIN the last fifteen years, it has become more and more frequent for general hospitals to include some type of psychiatric service in their out-patient departments. These special services have developed because of a demand on the part of psychiatrists and social workers for a place to which so-called "mental cases" may be taken for examination and treatment, and because of a realization on the part of internists, pediatricians and other physicians that many of their patients have disorders that are functional.

A psychiatric service passes through various stages. Starting frequently with a consulting neurologist, it develops into a neurologic clinic or a neuropsychiatric clinic and finally becomes a psychiatric or a mental hygiene clinic. A distinction is usually made between a psychiatric and a mental hygiene clinic, the first accepting individuals with more or less clear-cut disease entities which are treated by psychotherapy and the second furnishing advice in regard to individuals and families whose constitutional and social maladjustments are often treated by manipulating the environment, that is, by the psychiatric social worker.

In a large city there are types of clinics that accept and treat various types of patients. A neurologic clinic is one part of a hospital out-patient department and is similar to a surgical or medical clinic. The patient gives his own history, and the diagnosis and treatment depend almost entirely on the result of the neurologic examination. The skill of one man, the neurologist, is the important factor. In most neurologic clinics, however, a large proportion of patients present not neurologic, but functional disorders. For this second group, the neurologic examination and electrotherapy and hydrotherapy are not sufficient. Since the disorder of these patients involves the personality as a whole, a detailed personal history and sometimes verification and further data from relatives are necessary before the patients' problem can be understood. In many neurologic clinics, the neurologist takes upon himself the task of this additional type of examination and adds psychotherapy to his treatment tools. Because of the type of patient treated, the clinic may come to be called a neuropsychiatric clinic.

Further specialization may lead to setting aside one day in the neurologic clinic for patients with functional disorders or having a separate psychiatric clinic, possibly a refer from the neurologic clinic. Physicians especially trained in psychiatry will be assigned to the staff of this mental health class or mental hygiene clinic. In addition to the services of a specially trained staff, a special examination technique may be introduced. A psychologist may give psychometric examinations. Clinic secretaries, hospital social workers or psychiatric social workers may secure a history from the patient before he is examined by the psychiatrist. Home investigations may be included and efforts made to change the environment. Treatment extends outside the patient himself and the clinic walls and is carried on not only by the psychiatrist, but by his partner, the social worker.

### *Those Who Seek Treatment*

In the neurologic, the neuropsychiatric and the psychiatric clinics, patients present more or less definite disease entities, neurologic disorders, major psychoses and minor psychoses. Children referred are epileptic or mentally defective. Besides the patients who are definitely sick and need a physician's care, there is a large group of persons in the community who are maladjusted—persons who drink, persons who complain, persons who seldom work and children who misbehave. These persons need mental hygiene and for them relatives and social workers seek advice. A small proportion of these patients are referred to neuropsychiatric and psychiatric clinics, but the type of service provided seldom solves the problem. The psychiatrist is confronted by a situation he recognizes but does not know how to treat. It is to meet these situations that clinics bearing such titles as the family welfare clinic, the community guidance clinic and the advisory bureau are set up in social agencies, clearing bureaus and courts. In these clinics, the emphasis is social and psychiatry becomes the tool of social service.

In contrast to the neurologic clinic where any patient with twenty-five cents may go and tell his complaints to the "professor," is the mental hygiene clinic where the individual who is received as a patient is intensively





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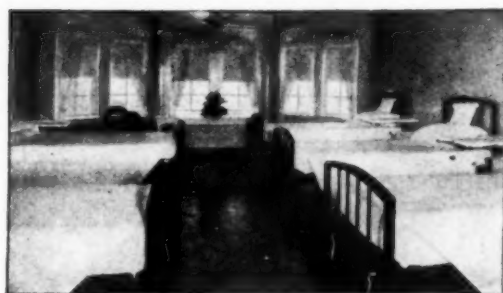
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studied by other members of the professional staff before he is referred to the psychiatrist. Every effort is made to find out all about him, his physical condition, his intelligence level, his economic history and his personal relationships. With this information, the psychiatrist is asked to interpret the situation and outline a treatment plan. The procedure in a neuropsychiatric clinic is usually something between these two extremes.

The set-up, method of examination and treatment in various clinics are correlated with the type of patient for whom the service is intended. It is somewhat correlated, however, with the point of view of those in charge and with their attitude toward the social implications of psychiatry. Psychiatric or mental hygiene clinics are set up because there is a demand for this service, but there is often little enough evaluating of the actual service given. A patient with social maladjustments, with acute personal problems and with a disorder which involves the individual as a whole may be treated in the same way as a patient with a normal personality who has an infected lung or a broken finger. An effort on the part of propagandists in the mental hygiene movement to have mental patients treated in the same places as persons with other types of disorders has often resulted in their being treated in the same way. This treatment has sometimes been of little benefit to the individual patient and has led some social workers and physicians to doubt the efficiency of psychotherapy and other mental hygiene measures.

In order to discover exactly what type of service was provided in New York City for individuals with various kinds of psychiatric and mental hygiene problems, a survey was made under the joint auspices of the National Committee for Mental Hygiene and the New York City Committee on Mental Hygiene,<sup>1</sup> covering clinics in the out-patient departments of hospitals, in schools, social agencies and institutions. Following this survey, minimum standards for psychiatric clinics were drawn up by three subcommittees of the New York City Committee on Mental Hygiene, based partly on the findings of the survey and partly on the general beliefs of a group of specialists.

### *Standards the Hospital Must Meet*

While the findings of the survey were limited to one city and to forty-eight services, the standards are presumably applicable to psychiatric and mental hygiene clinics connected with general hospitals throughout the country. The subcommittees of the New York City Committee worked independently and three reports were submitted, one by clinic directors, one by clinical psychologists and one by psychiatric social workers. By making selections from the three reports, a general set of standards can be made covering (1) clinic setting, (2) details of clinic management, (3) staff qualifications and (4) examination and treatment of the patient.

Since adequate psychiatric and mental hygiene clinics cannot be provided by hospitals that are below par, it is required that the hospital in which the clinic is set up shall meet the standard set by the American College of Surgeons, that the other departments of its dispensary shall be adequately equipped to give first-rate medical service and that the hospital shall be able to ensure a budget adequate to meet the minimum standards of the psychiatric clinic. Specifically, in regard to the New York

situation, it was recommended that the New York City committee prepare a list of hospitals of proper caliber to include mental hygiene services in their out-patient departments, and urge them to establish standard clinics.

The actual physical arrangements of the psychiatric clinic itself were described by the committee of social workers. "It is essential," they said, "that there be comfortable waiting rooms, provided with reading matter, light and ventilation. Every effort should be made to foster an atmosphere conducive to relaxation. Rules of silence and nagging on the part of attendants should be eliminated." Private examining rooms should be provided.

### *Measuring the Service by the Staff*

Various details of management are important if a clinic is to run smoothly, such as an appointment system—the clinic staff to meet its appointments promptly—in order to prevent "interminable waiting that gives rise to a state of mind in no way conducive to the establishment of a good rapport with the psychiatrist when the patient finally comes to his attention," and a limited intake so that the necessary time may be given to each patient. Intake may be limited geographically or by type of case, and to some extent by a fee graduated from free service to an undetermined maximum. A fee, if standard for all clinics in a district, will reduce the practice of shopping around at different clinics and will provide a certain amount of revenue. (Pay for psychiatrists as well as psychologists and social workers is considered desirable.)

Whatever the caliber of a hospital, whatever the space and furnishings, whatever the carefully planned rules and regulations, a psychiatric service is no stronger than the professional members of its staff. Since a psychiatric clinic must be prepared to examine and treat different types, adults with the first recognized symptoms of one of the major psychoses, great numbers of psychoneurotics, who spend their time in attending clinics, persons whose personality disorders have brought them to the attention of social agencies, mentally defective children, and children with behavior problems, the directing psychiatrist must have had a wide experience.

To provide more physicians with this background, more and better instruction must be given to medical students in normal and abnormal psychology and in modern psychiatry dealing with the neuroses, personality deviations and the emotional difficulties of those physically ill. Moreover, the clinical psychologists suggest that "instruction of the aims and techniques of clinical psychologists be introduced into the curriculum of medical schools." For a psychiatrist to draw a child to his knee and ask, "What is the difference between a cat and a dog?" is no longer to be considered a psychological examination.

The psychologists also have their professional standards: a preparation that includes two years of graduate work and three years of clinical experience—this is required for registered psychologists by the New York State law. Psychiatric social workers, according to standards for membership in the American Association of Psychiatric Social Workers, must have a bachelor of arts degree from a college of recognized standing, or a well established equivalent, and either graduation from an accredited school of social work and one or two years of experience in psychiatric social work, or four years of experience in psychiatric social work. The assistant psychiatrist, psychologist and psychiatric social workers must fulfill the same educational requirements as his chief, but may be receiving some of his experience in the clinic to which he is now attached.

The proper sized staff for a psychiatric clinic depends,

<sup>1</sup> Report of a survey of mental hygiene facilities and resources in New York City, utilized by out-patient departments of hospitals and dispensaries, public schools, social agencies and by courts and protective agencies, made by Elizabeth Greene, George K. Pratt, Stanley P. Davies and V. C. Branham.



A given quantity of "Phillips Milk of Magnesia" (1) neutralizes about four times as much acid as a saturated solution of sodium bicarbonate, (2) and nearly fifty times as much as lime water. (3)

## Neutralization in Gastric Acidity

**H**YPERACIDITY of gastric contents is not so much an indication of overproduction of acid as of failure of neutralization.

"Phillips Milk of Magnesia" promptly counteracts hyperacidity, acidity of the mouth and other obvious manifestations of acidosis. When the natural factors of neutralization (food, saliva, secretion of the pyloric

end of the stomach and regurgitation of duodenal contents through the pylorus) fail to neutralize the gastric content, there is a need for "Phillips Milk of Magnesia."

Its antacid action is pronounced. It is agreeable to the taste and inviting in appearance. Further, it has the additional merit of being a laxative—a quality of importance since constipation is so frequently the underlying cause of hyperacidity.

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# PHILLIPS

## Milk of Magnesia

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on (1) the type of patient accepted, (2) whether the purpose of the service is mainly diagnostic or diagnosis and treatment and (3) the number of clinic hours. The standards set up by the New York City committee do not favor small, part-time clinics, but require six clinic hours a week divided into two or three periods and a minimum of twelve hours a week of attendance from the psychiatrists. This would be either two three-hour sessions or three two-hour sessions with two psychiatrists at each session. The director is to be a psychiatrist and psychologists are to be attached to all clinics dealing with children. Ideally, all clinics of any type whatever dealing with children should have such service available. Three psychiatric social workers to each full-time psychiatrist are the required number.

The standard clinic is now ready for its first patient. It is well equipped not only with its own staff but with consultant facilities. Thorough examination and treatment must be given to each patient. Sufficient time has already been secured for each patient by the appointment system. Specifically the psychiatrists feel that "good work cannot be done if the psychiatrist must see more than an average of two patients an hour." This means that half an hour must be given to each patient. On the other hand, the psychiatric social worker says that "experience shows that the time allotted for a first interview period should be the minimum of an hour." They, no doubt, are reacting to a situation that occurs frequently in which the psychiatrist keeps Mr. B long past his allotted time, while Mrs. C, who has the next appointment and Miss A, who has an even later one, are becoming restless. The psychiatrist engrossed in Mr. B's problems has no realization of the strain on those outside his office.

#### Ward Beds Should Be Available

The clinical psychologists believe that "from two to two and a half hours are necessary for the examination and interpretation of a single case. The committee feels that the requirement that five or six children be tested in the course of a day necessarily precludes careful accurate work." A thorough social examination or history, secured by the psychiatric social worker, is usually an important part of the total examination, but it is recognized that under present conditions a complete and detailed social history cannot be secured in all cases.

Both the clinical psychologists and the psychiatric social workers emphasize the desirability of staff conferences on all cases, while the psychiatric social workers definitely describe the purpose of these discussions as the basis of a diagnosis and treatment plan. The psychiatrists sum up treatment as "various forms of therapy including psychotherapy." The psychiatric social workers specify that when treatment is to be given, it may be allocated in various ways, carried either by the psychiatrist and psychiatric social worker together or by the agency worker, who refers the case, in close consultation with the psychiatric social worker and the psychiatrist, or, in some cases of mild personality adjustment, by the psychiatric social worker who, working in consultation with the psychiatrist, carries the main responsibility for treatment.

Reference has already been made to other adequately equipped services to which patients may be referred for special examinations, such as x-rays and blood examinations. It is felt that it is desirable for ward beds to be available to the clinic, even though they be used infrequently, for such cases as may safely be studied or treated in a general hospital. A third treatment standard is for follow-up on patients that break appointments.

It goes without saying that a standard clinic must have complete records and enough clerical assistance to keep them up-to-date and to send out reports to any agencies who inquire regarding their clients.

The preceding standards refer primarily to psychiatric clinics in connection with general hospitals. The standards for mental hygiene clinics conducted by agencies are somewhat dissimilar, but they emphasize an adequate budget and definite provision for medical service and treatment, since these clinics will not have other out-patient service immediately available. It is believed that agencies will not continue to develop individual clinics, if specialized services meeting their needs can be provided by the hospital clinics.

The standards of the New York City Committee on Mental Hygiene have been drawn up to meet a specific situation in New York City. A description of them is offered with the hope that they may at least offer a point for discussion in other sections of the country.

### A New Way of Expressing Sympathy for a Sick Friend

Friends who send flowers to patients in the Reading Hospital, Reading, Pa., are encouraged to invest the money they would ordinarily spend for flowers in hospital service instead.

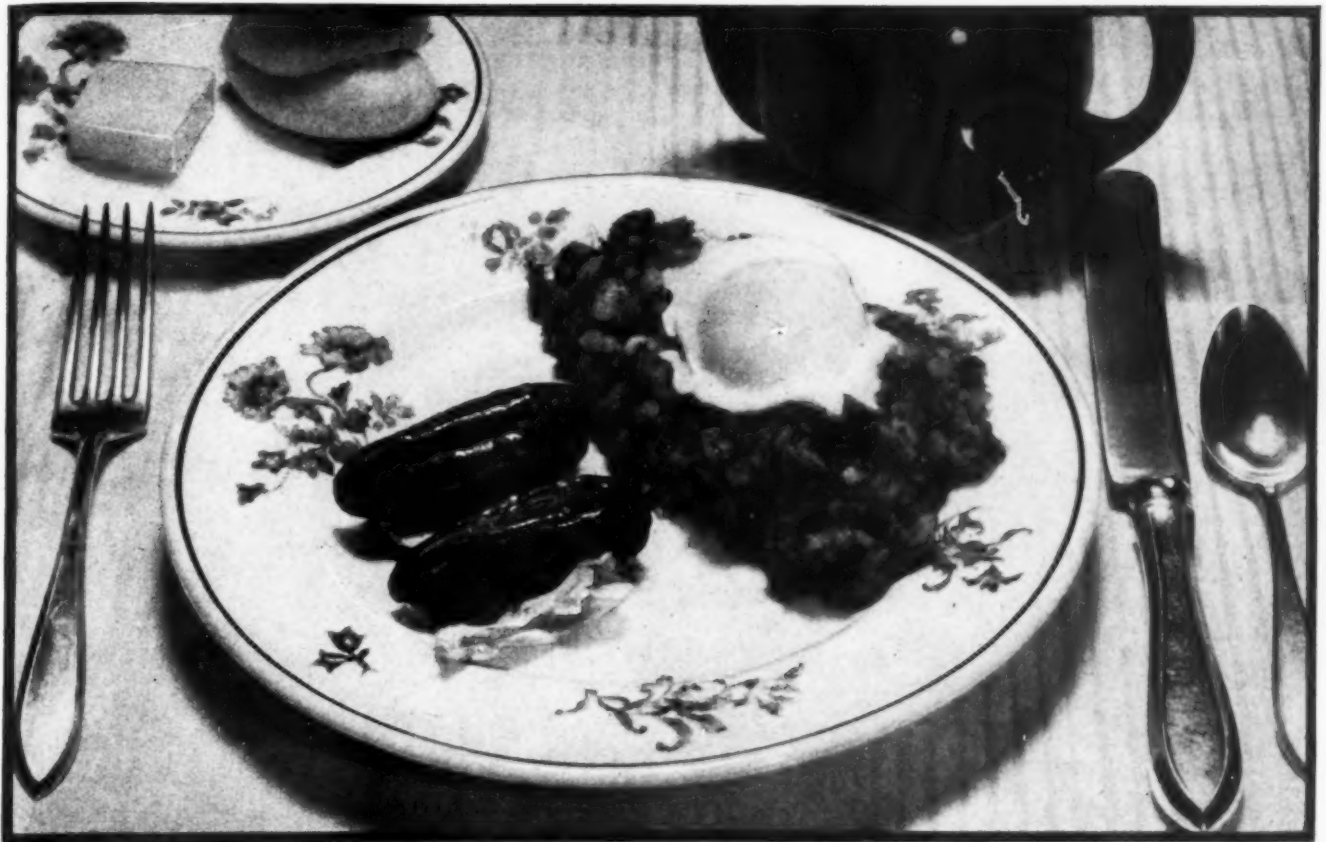
The plan in use there was described by Dr. E. D. Funk, associate medical director of the hospital, at the recent congress on Medical Education, Medical Licensure and Hospitals. The hospital has adopted a policy of issuing courtesy cards so that a friend, instead of sending up a \$5 bouquet of flowers, may come to the desk and say, "My friend is here. I believe you have a system whereby I may partly defray his expenses." As a result he pays \$5, the cost of his friend's room for the day. He sends a card to his friend with this message, "My dear \_\_\_\_\_, I wish to extend to you my greatest sympathy, and I want you to be my guest for the day in this hospital. I wish that you might have a speedy recovery. Your old friend, \_\_\_\_\_."

"The patient is not resentful," Doctor Funk said. "He does not think he is receiving charity. He is a guest. What does a person do if he has no room for his friends in his home? He sends them to a hotel and pays their bills. For the person who is in trouble and sick, his friends may help him a little by expressing sympathy in this way."

### Record Librarians Are Now Issuing a Professional Journal

The Association of Record Librarians of North America now has its own official organ. The first number of *The Bulletin* was issued in January. It will be published quarterly. *The Bulletin* will publish conference papers, news of local associations, personal items and suggestions for future discussions.

The editor-in-chief is Dr. T. R. Ponton, superintendent, Illinois Masonic Hospital, Chicago. Other members of the editorial board are Mrs. Grace Myers, Massachusetts General Hospital, Boston; Frances Benson, Bryn Mawr Hospital, Bryn Mawr, Pa.; Ruth T. Church, City Hospital, Boston; Verna Mae Emery, Hospital for Joint Diseases, New York City. Mrs. Jessie W. Harned, Chicago, is the *ex officio* member of the board.



*Libby's Sweet Pickles give this dish added flavor and zest*

## Now give the nurses a treat— Serve this relish: Libby's Sweet Pickles

AFTER dealing with abnormal appetites, and with an endless variety of menus for restricted diets, planning meals for the nurses is welcome routine.

One fact about feeding the nurses has been definitely established; it pays to do well by them. With nurses as with all workers, good food is the first step to contentment and the conscientious performance of duty.

Dulled by long hours of confinement, nurses' appetites too need to be coaxed with inviting delicacies. And there are ever so many ways to make meals attractive without making them costly.

Inexpensive supper dishes such

as Spanish Rice, beef stew and dumplings, and baked hash can be given an appetizing touch, and repeated more frequently, if served with Libby's Sweet Pickles. Libby's Sweet Pickles are an inexpensive treat for nurses—and for employees, too.

Libby's Sweet Pickles are a choice variety of crisp, tender cucumbers grown from pedigreed seed in carefully selected soil. Cured in salt brine, seasoned in spiced vinegar, and "aged" in sweet liquor, these pickles have a sweet, spicy flavor that pleases the taste and sharpens the appetite.

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**Dept. N-24, Welfare Bldg., Chicago**

Serve Libby's Sweet Pickles with nicely browned Corned Beef Hash, or a rich Beef Stew with Dumplings. For the nurses.

Libby's Sweet Pickles are delicious in a Vinaigrette Sauce for Libby's Asparagus or Cauliflower, either hot or cold. To mayonnaise dressing, add chopped Libby's Sweet Pickles, chopped green pepper, parsley and chives if desired. Flavor with Tarragon vinegar.

Make Club Sandwiches with three slices of toast and fillings of chicken, bacon, lettuce, tomatoes and mayonnaise. Hold together with toothpicks, with a piece of Libby's Sweet Pickle on the ends. Garnish with Sweet Pickles and parsley. For Sunday supper for the internes.

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Evaporated Milk  
Mince Meat  
Boneless Chicken  
Stringless Beans



## HOSPITAL EQUIPMENT AND OPERATION

With Special Reference to Laundry, Kitchen and Housekeeping Problems

Conducted by C. W. MUNGER, M.D., Director,  
Grasslands Hospital, Valhalla, N. Y.

### A Heating System Suited for a Varying Winter Climate

A HEATING system that has been found satisfactory for a varying winter climate is one that is provided by hot water under forced circulation. Such a system is functioning in the Walla Walla Valley General Hospital, Walla Walla, Wash., where in the winter spells of cold weather alternate with spells of mild weather and where in the summer dry winds stir a fine dust from the soil in the valley, which often hides the sun for weeks at a time. A description of the system is given in the April number of *Heating and Ventilating*.

Included in the heating installation are two cast-iron boilers and a 2-inch circulating pump, with the by-pass so arranged as to permit gravity circulation in mild weather and after circulation has been established.

Flows and return mains are on the ground floor ceiling, with risers feeding up. Radiators on the ground floor are fed downward from the mains, thus eliminating underground returns and the attendant cost of conduits or trenches. This item in itself forms one of the most desirable features of forced circulation water heating.

Since the prevailing winds in Walla Walla are from the south, with cold winds either from the northeast or northwest, the heating returns are zoned in three groups: one for the south façade; one for the east and north front and one for the west and north front.

Each branch extends to the return header through a gate valve with a  $\frac{1}{4}$ -inch hole and is provided with a thermometer. By throttling these valves, the average temperature of the water can be lowered on the leeward side and more heat forced to the windward side. Inasmuch as the district experiences considerable sunshine during the winter, the returns on the south side are often throttled to compensate for the heating by solar radiation.

In the construction of the hospital, brick walls are laid around a concrete frame with Massillon joists, concrete floors and suspended ceilings. In the space between the floor and ceiling below are the pipe mains and ducts. In the same space are the branches from the risers to the radiators. Equalizing radiator valves are used throughout and adjusted for the final regulation of the system.

For high pressure steam service in the kitchen, for sterilizers and for blanket warmers, a vertical 15 h. p. steel boiler is installed. A small electrically driven boiler feed pump and receiver of a 3-gallon per minute capacity returns the high pressure condensate to the

boiler. Domestic hot water is furnished by a garbage burner with a 36 by 72-inch storage tank. The tank is provided with a high pressure steam coil.

Also connected to the high pressure steam service is one section of the tempering coil and one radiator in each operating room. Through this arrangement it is necessary to operate only the small boiler during the milder months.

Included in the ventilating and air conditioning equipment, which is independent of the heating plant, are three stacks of tempering coils, one supplied with high pressure steam and two with hot water. There is also an atomizing type of air washer and a blower of 6,000 c.f.m. capacity. Two reheating coils, which are part of the equipment, are supplied with hot water.

Located between the air washer and reheating coils and controlling the tempering coils is a thermostat set at 53° F. Another thermostat controlling the reheating coils is located in the fan discharge and is set at 70° F. This arrangement ensures a humidity of about 60 per cent, which is essential in the treatment of the prevailing bronchial ills incident to a dry cold climate.

Conditioned air is delivered to every room. Lock registers are placed in those rooms which are in continual use, and registers with adjustable limit stops are provided for those rooms which are subject to intermittent use. Through this means the system may be adjusted to equalize the delivery of air, and at the same time the registers to unused rooms may be closed. When again opened they will be set correctly for the desired delivery.

A gravity exhaust duct leads from the closet of each patient's room. The exhaust ducts are gathered in the attic spaces and discharged through three gravity ventilators. A separate ventilator is used for the ducts from the isolation ward. An independent exhaust system with a 3,600-c.f.m. fan ventilates the toilets, kitchens, laboratories, and other rooms which may contain odors.

Every effort has been made to provide as complete an equipment as possible for a building of this character at a minimum cost. During the three years that the building has been occupied, the plant has given excellent satisfaction and has proved simple and economical in operation. As the building stands, it has a capacity of about sixty beds. Any future addition will be in the form of new buildings. When that time arrives a separate boiler house will be built, together with a high pressure steam distributing system. Converters then will replace



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blue skies and soft  
breezes — a desire to re-  
lax, let down, take things  
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It's vacation time and  
working forces are depleted;  
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Many superintendents who  
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HOSPITAL SUPPLIES

the present heating boilers, or the boilers will be connected in multiple with the converters and the existing plant retained for breakdown service.

At the time the forced hot water system was installed in the Walla Walla Valley General Hospital, it was determined that a ventilating system with washed air was essential, since the windows must be kept closed during the dust storms. Even though the dry bulb temperature rises to over 100° F. in the Walla Walla Valley, the wet bulb temperature seldom exceeds 60°. Hence, an air washer produces considerable cooling effect in that locality.

## Cleaning White Metal Fittings and Equipment

Regular washing with soap and water is usually efficacious in cleaning fittings and equipment made of monel metal, nickel, chromium and steel compounds and other white metals, according to *Hotel Management*. Cleansing powder and warm water may also be used.

"For kitchen equipment, cooks' tables, dish tables, work tables, steam tables, ranges, refrigerators and warming and food storage cabinets made of or fitted with these metals, cleanliness is more important than mere brightness for these surfaces because they come in contact with foods," the article continues. "Therefore, thorough rinsings in hot water should follow.

"The discoloration of these metals is seldom due to corrosion but rather to accumulation of grease and dirt in the minute channels which result from grinding and polishing the metals in order to retain their satin finishes. Soap and water remove these discolorations unless they have been neglected over a long period of time. Then stronger scourers and cleaners are needed. Coarse scourers scratch the surface, causing deeper channels in which dirt may accumulate. Table surfaces are also scratched by friction from pushing pots, pans and kettles about in daily use."

## Reclaiming Gauze at Presbyterian Hospital, Chicago

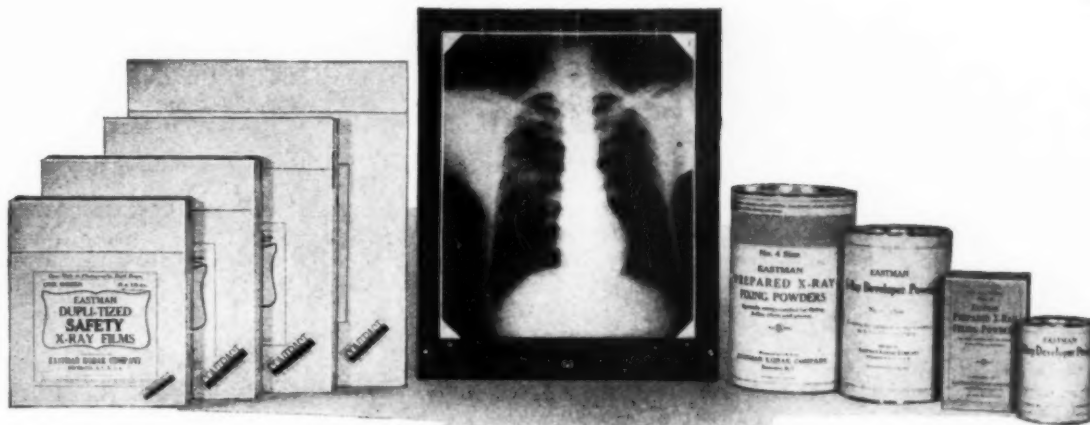
By ASA S. BACON, Superintendent

The process of reclaiming gauze as it is practiced at the Presbyterian Hospital, Chicago, a 425-bed institution, is begun by the nurses on the floors.

Into bags kept for that purpose the nurses put all the gauze from noninfectious cases that they feel can be re-used. All gauze from pus cases is burned. Each morning, from five to seven o'clock, the bags are collected and sent to a room adjoining the laundry where they are kept in covered trucks until the wash day for gauze arrives. The amount of gauze collected every week fills three washing machines, and the washing, which is done once a week, is usually begun late in the afternoon.

The first steps are: three cold water rinses of two minutes each; next, two soda ash baths of ten minutes each. The gauze is then washed in hot suds for ten minutes and afterwards put in boiling hot bleach for ten minutes in order to sterilize and whiten it after washing. It is now given three hot rinses and two cold rinses and is then extracted for ten minutes. From first to last the washing and extracting of gauze take about one and a half hours. It is then dried in the drying tumbler and sent to the supply room in large bags.

In the supply room it is sorted and put on stretchers, then taken off and folded on special gauze folding ma-



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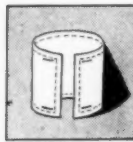
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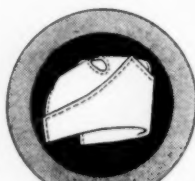
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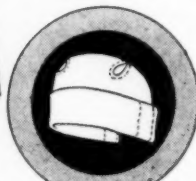
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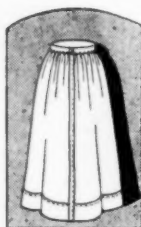


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chines. The folded pieces are gathered up in fours, wrapped in pieces of clean muslin and put in bags, which are dated and sent to the sterilizing room, where they are sterilized three times. The gauze is now very white, soft and as good as ever, although it has shrunk a little in the washing. It is used in large amounts for hot dressings, though it is quite as good for dry dressings. All pieces of gauze that are torn or are too small are sent to the engine room and garage to be used for cleaning machinery.

The soap used in the laundry is made from leftover grease and fats from the kitchen, an economy measure.

## COST OF WASHING GAUZE

(8 bags a week—35½ lbs. net each) 16-20 count

1. Materials Used:	Monthly
Soda .....	\$14.08
Bleach .....	1.52
Soap (grease from kitchen) .....	1.46
Total cost of materials .....	\$17.06

2. Labor:	
Laundry	
Washer .....	\$ 3.50
Extractor .....	2.53
Dryer .....	2.24
Supervising .....	21.50
Garbage room	
Collector, sorter, hauler .....	15.00
Total cost of labor .....	\$44.77

3. Machinery:	
Depreciation	
Three washing machines .....	\$ 1.08
One extractor .....	.16
Two drying machines .....	1.09
Power	
To run washing machines .....	2.42
To run wringer .....	.49
To run drying machines .....	1.74
Engineer's salary for overseeing machinery .....	4.30
Total .....	\$11.28

Total cost of washing 8 bags (284 lbs.).....\$73.11

The laundry receives and washes 8 bags of gauze each week, weighing 35½ lbs. net each. Standard figures show that 1 lb. of new and unused gauze contains 23 sq. yds. Therefore 35½ lbs. contain (35½x23) or 816¼ sq. yds.

Monthly Cost of Washing  
\$73.11 cost per mo.—28,305.33 sq. yds. a mo. or \$.002583 per sq. yd.

\$73.11 cost per mo.—1,230.66 lbs. a mo. or \$.0594 per lb.

## COST OF PREPARING WASHED GAUZE FOR USE

1. Labor:	Monthly
Supply room	
Sorting, stretching, folding .....	\$58.24
Supervising .....	21.50
Sterilizing room	
Salary for extra time to sterilize washed gauze...	13.65
Total cost of labor .....	\$93.39

2. Machinery:	
Cost of depreciation and power for sterilizer .....	\$ .38
Total cost of preparing .....	\$93.77

	Monthly by Lbs.	Monthly by Yds.
Gauze received from laundry .....	1,230.66	27,347.84
Less: Waste gauze sent to engine room <sup>1</sup> each day as waste—3 bu. a day 7 days..	338	7,511.11
	892.66	19,836.73

Monthly Cost of Preparing Gauze  
\$93.77 cost per mo.—19,836.73 sq. yds. a mo.—.0047 per sq. yd.  
\$93.77 cost per mo.—892.66 lbs. a mo.—.105 per lb.

Full Cost of Reclaiming Gauze	Per Pound	Per Yard
Cost of washing gauze .....	\$.0594	\$.002583
Cost of preparing gauze .....	.105	.0047

Total cost of reclaiming .....

Saving on Waste for Engine Room  
Outside cost of No. 1 waste.....\$1.475 per lb.  
Our cost of No. 1 waste .....

Saving on waste .....	Per Pound	Per Yard
Saving on Gauze .....		
Cost of new gauze.....	\$589	\$3,026.50
Cost of reclaimed gauze .....	.1644	.007283

Saving on gauze .....

Total Savings  
On waste<sup>1</sup> per mo. 338 lbs. x .0881.....\$ 29.78  
On gauze per mo. 19,836.73 yds. x .019217..... 381.20

Total savings per month .....

<sup>1</sup>Used in engine room, garage and other places for wiping machinery instead of purchasing waste at 14½¢ per lb.

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The window shades that you have known give you no standards of comparison to NIAGARA WINDOW SHADING, washable and waterproof, newly perfected by *Columbia*. Point for point...merit for merit...simple fact for simple fact...NIAGARA literally sets a new standard of what you may expect a shade to be.

NIAGARA is handsome...rich in colorings; translucent; fine and smooth in finish.

NIAGARA is washable...*really* washable...*repeatedly* washable. It absorbs no dirt, and hence retains none. A non-alkaline suds quickly restores its original beauty.

NIAGARA is splendidly made...even and clear in texture. No pains have been spared to make it altogether fine.

NIAGARA is durable...it will not stretch nor "go dead" with long exposure to the sun. Its washability feature affords unusual benefits, because the fabric itself is so long-lived.

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## At times when even *Seconds* count THE NURSES' SIGNAL-PHONE

*brings Patient and Nurse  
into Instant Voice-to-  
Voice Contact!*


**O**PERATING by means of the super-sensitive DICTOGRAPH microphone and "soft speaker", the Nurses' SIGNAL-PHONE transmits the voice of the patient direct to the nurse and brings back her immediate response . . . Requests are made and service is rendered without a moment's delay—without the handling of even a mouthpiece or receiver by the sick person!

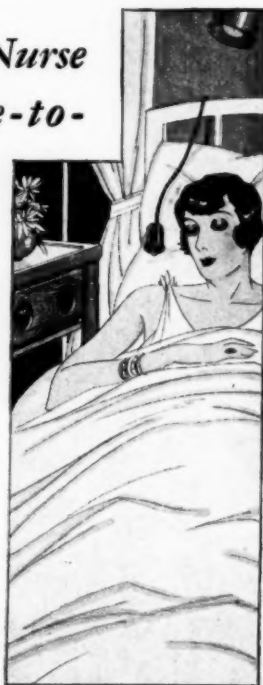
In every quarter, the nation's leading hospitals are now turning to this remarkable system to simplify the entire communication problem between nurse and patient.

You will be interested in the DICTOGRAPH folder which describes the Nurses' SIGNAL-PHONE in greater detail. It is free, of course,—upon request.

# DICTOGRAPH

PRODUCTS COMPANY, INC.

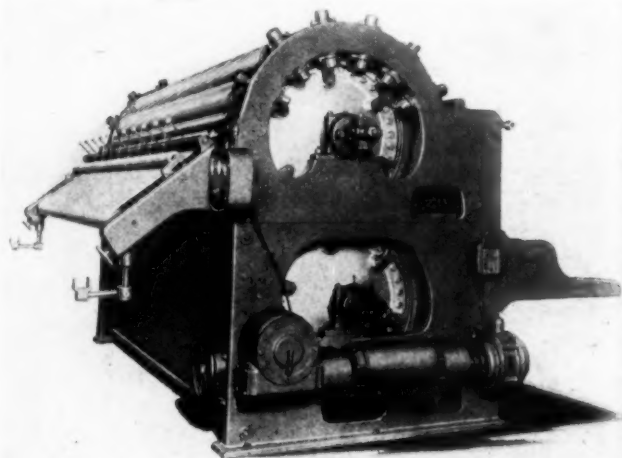
226 West 42d Street  New York, N. Y.



## New Calender Reveals Unique Construction

An entirely new calender, redesigned in every detail, is now ready for distribution. The new design is the outcome of a long period of research and practical field tests, with the result that the manufacturers believe it to mark one of the outstanding achievements in laundry machinery development.

The accompanying illustration portrays the symmetry of design of the calender, its rugged construction, marked refinement and full inclosure of the working parts. The customary chain drive of the top pressure rolls has been



*This new calender is equipped throughout with ball and roller bearings.*

eliminated and replaced by a positive gear drive. A new design of the steam trunnions provides an automatic gland takeup, which is said to eliminate the usual frequent packing of the trunnion gland. Driving rolls on both the upper and lower apron have been increased in diameter, giving a positive drive and stop to the apron.

The well established principle of governing roll pressure by means of air cylinders is found in the new calender but the mechanism has been redesigned and greatly improved. Among the many unique features is the use of stainless steel for the feed and nose boards and also for the folding tables.

A noticeable feature is the compact and neat instrument board which is placed at the eye level of the operator and tells a continuous story of ironer conditions. The apron speed, steam pressure and roll pressure are always before the operator, and the control of each of these functions is at his finger tips.

## A Combination Dust Screen and Ventilator

To provide fresh air, dust free, a combination dust screen and ventilator is now being manufactured. Or, for those who already have ventilators, the dust screen itself is available. These screens are installed outside the window and do not interfere with the raising or lowering of the window. The patented design allows the screen to swing out of the way when the windows are being washed. When the dust screen is used in combination with a ventilator, fresh air is admitted without draughts and without dust.

The screens are made in all widths, either fourteen or twenty inches high.



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- 5** No metallic sounds—eliminated by special construction.
- 6** Channel hung drawers—glide silently and easily—cannot fall out.
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(Equipped with Faultless Casters)



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## DOEHLER METAL FURNITURE

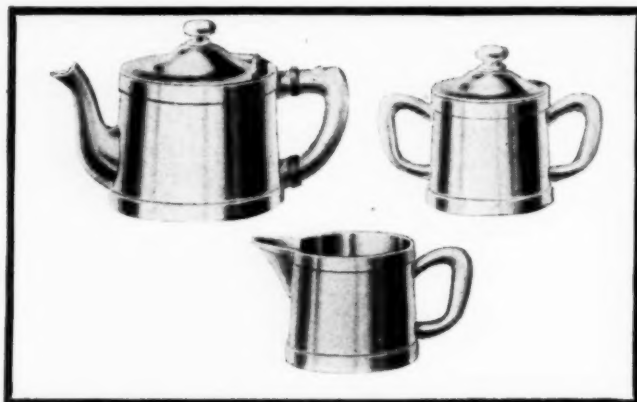
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SILVER**

## Texas Association Holds First Meeting

Texas has joined the roster of those states that now have hospital associations. The first meeting was held in Fort Worth on March 15, with eighty-five administrators and members of boards of trustees present.

Officers of the new association were elected as follows: president, Dr. L. R. Wilson, John Sealy Hospital, Galveston; president-elect, Robert Jolly, Baptist Hospital, Dallas; first vice-president, C. Q. Smith, Methodist Hospital, Fort Worth; second vice-president, Martha Robertson, Medical and Surgical Hospital, San Antonio; treasurer, May Smith, Bradford Memorial Hospital, Dallas; secretary, Joe Miller, Jefferson Davis Hospital, Houston. Trustees named were: Ellen Louise Brient, Physicians' and Surgeons' Hospital, San Antonio; Joe Miller; Dr. J. H. Stephenson, City and County Hospital, Dallas; Mother Presentation, St. Joseph's Infirmary, Paris; Miss Ara Davis, Scott and White Hospital, Temple.

## Rhode Island Superintendent Is Honored

Dr. John M. Peters, superintendent, Rhode Island Hospital, Providence, R. I., for forty years actively associated with the hospital's contributions to community health, is to be perpetuated in name with the construction of the medical staff building which is soon to be erected on the hospital grounds through the recent gift of \$150,000 by United States Senator Jesse H. Metcalf. The building will be known as the John M. Peters House. Through the generosity of Horatio N. Campbell, trustee, who has given \$25,000, the new building will be furnished with modern fixtures and comforts.

## Patient Addresses the Graduating Nurses of Montefiore Hospital

The sixth annual commencement exercises of the school of nursing, Montefiore Hospital, New York City, were held on the evening of March 29 in the presence of about 300 nurses and their guests.

The program was planned under the chairmanship of Siegfried Peierls of the nursing committee of the board of trustees. Fred M. Stein, prominent social worker and philanthropist, who was recently elected president of the hospital, gave a short resumé of the evolution of Montefiore Hospital from a home for incurables to a hospital for chronic diseases. Mildred Constantine, director of nursing, then reported for the school of nursing. She was followed by Dr. Haven Emerson, former commissioner of health of New York City and now professor of public health administration at Columbia University, who spoke of the difference between the kind of nursing that was done in the days when his father was an intern at the New York Hospital and the kind of nursing that is taught and practiced to-day. He emphasized the advantages that the modern nurse has in her various specialized fields over her earlier sisters.

Diplomas were presented by the director of the hospital, Dr. E. M. Bluestone, who then introduced one of the patients, Abraham Goldberg, who is chairman of the patients' welfare council, editor of the *Montefiore Echo* which is published for the benefit of the patients and employees, and liaison officer between the administration

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and the patient group. Mr. Goldberg, in a happily worded message written on behalf of the patients of the hospital, added their blessing to the student nurses who had served them during the years of their training. The patients paid tribute to the profession generally and to the twenty-eight members of the graduating class especially. This kind of message, which is somewhat unique in schools of nursing, was greeted with prolonged applause and there was universal recognition of the touching tribute which had been made to the graduating class by the patients whom they had served.

The school of nursing of the Montefiore Hospital which replaced the school of attendants nine years ago has now graduated eighty-five nurses, many of whom are on service in the hospital.

## Indiana to Meet Again Next Year With Illinois and Wisconsin

A decision to meet jointly with the Illinois and Wisconsin Hospital Associations next year was reached at the meeting of the trustees of the Indiana Hospital Association in Indianapolis, April 12. The trustees are in accord with the plan that was followed this year—each association to meet alone the first day and then to join with the others for the remaining days.

## Trustee Leaves \$200,000 to Lake View Hospital

When the will of John H. Harrison, trustee of Lake View Hospital, Danville, Ill., was read after his death on March 2, it was found that he had left to the hospital he served \$200,000 to erect a memorial to his mother. The memorial, which will take the form of an addition to the hospital, is to bear the name of his mother, Minta Harrison.

"The bequest is the largest gift that Lake View has ever received," says the *Lake View Hospital Bulletin*. "From the organization until now, hospital buildings have been erected largely on faith. To have a building given outright is a new experience."

Mr. Harrison had been a member of the board of trustees of Lake View Hospital for fourteen years.

## Industrial Conferences on Tuberculosis Renewed

The industrial conferences of the Chicago Tuberculosis Institute inaugurated twenty years ago were renewed with the opening of the new industrial department of the institute on April 25.

From now on the conferences will be held monthly "to provide helpful information from leading authorities on the subject of tuberculosis for industrial physicians and nurses, personnel directors, employment and welfare managers, factory and store superintendents and employers, and all others interested."

Dr. A. J. Lanza, assistant medical director, Metropolitan Life Insurance Company, was the chief speaker at the opening dinner conference. With Doctor Lanza on the program were Dr. H. E. Mock and Dr. J. C. Britton, eminent industrial physicians of Chicago.

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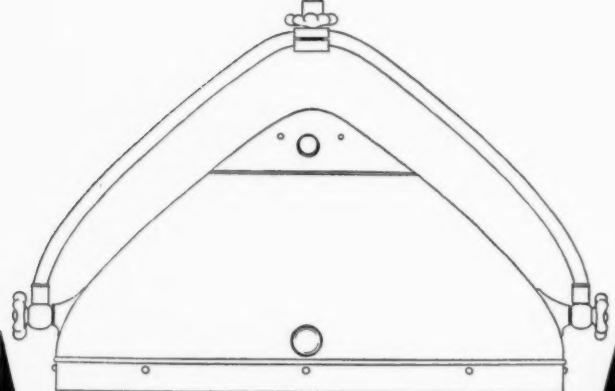
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## Psychiatric Unit Is Opened in Westchester County

The new \$6,000,000 psychiatric unit in Westchester County, Elmsford, New York, was recently completed, according to an announcement made by the board of directors.

The eighty-two beds in the new unit will be at the disposal of Dr. C. W. Munger, Grasslands Hospital, Valhalla, and will relieve the formerly crowded conditions.

The new five-story building is equipped with every sort of appliance for the treatment of mental ailments in accordance with modern methods.

## Site for Contagious Disease Hospital Arouses Opposition

The proposed site for the new hospital for contagious diseases to be built in Springfield, Mass., is opposed by the Springfield Academy of Medicine on the grounds that it is too far from the center of the city and that it should be near enough to be easily accessible to the friends and relatives of the patients. The academy favors the site of the existing City Home rather than the more remote site that is proposed.

On the other hand there appears to exist a feeling among a great many of the citizens that it is dangerous to build a hospital for contagious diseases in a well populated area, because of the danger arising from possible contagion.

The newspapers of Springfield, Mass., are expressing the hope that the disagreement may be settled amicably and thus avoid making a political issue of this matter.

## New Mental Hospital Inaugurated in Porto Rico

Nearly two thousand people attended the recent opening of the new mental hospital near Rio Pedras, Porto Rico, which will care for 1,000 mental patients. Additional patients who will not remain in the hospital will be admitted for treatment.

The hospital, planned along the most advanced lines of hospital construction, is Porto Rico's first attempt at providing modern facilities for the care and treatment of mental diseases.

## Money Presented to Jewish Hospital to Honor Treasurer

As a tribute to Ben Altheimer of St. Louis in recognition of his thirty years' service as treasurer of the National Jewish Hospital, Denver, a group of his friends presented a testimonial fund of \$30,000 to the hospital for him. Mr. Altheimer's reply to this testimonial gift was to add \$5,000 to the fund.

Dr. William S. Friedman, founder and president of the hospital, announced that the \$35,000 would be used as the nucleus of a building fund.